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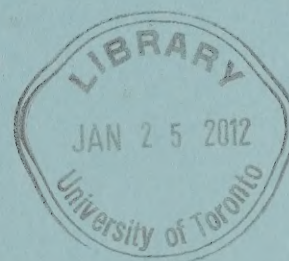
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## Reasons for Decision

**Enbridge Bakken Pipeline  
Company Inc., on behalf of  
Enbridge Bakken Pipeline  
Limited Partnership**

**OH-01-2011**



December 2011

**Facilities**

**Canada**





# National Energy Board

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## Reasons for Decision

In the Matter of

### **Enbridge Bakken Pipeline Company Inc., on behalf of Enbridge Bakken Pipeline Limited Partnership**

Application dated 17 January 2011 for the  
Bakken Pipeline Project Canada

**OH-01-2011**

**December 2011**

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## Abbreviations

Bakken Expansion Program	a series of incremental projects to be undertaken by Enbridge Pipelines Inc. and its affiliates in Canada and the United States, designed to meet shippers' transport needs in stages to transport crude oil from the Bakken Formation to market through the Enbridge Pipelines Inc. Mainline
Bakken Pipeline	proposed crude oil pipeline, approximately 123.4 kilometres in length, from the proposed Bakken Pump Station near Steelman, Saskatchewan, to Enbridge Pipelines Inc.'s existing Cromer Terminal near Cromer, Manitoba
Bakken Pump Station	proposed pump station to be located near Steelman, Saskatchewan, at NE 8-4-5 W2M
b/d	barrel(s) per day
Board or NEB	National Energy Board
BSFN	Birdtail Sioux First Nation
Canadian Shipper	any entity that has an agreement with a pipeline company to transport oil or any other hydrocarbon to that pipeline company at a receipt point located in Canada
CEA Act	<i>Canadian Environmental Assessment Act</i>
Certificate	Certificate of Public Convenience and Necessity issued under section 52 of the <i>National Energy Board Act</i>
Committed Toll	the charge for committed volumes, dependent upon the term and volume commitment of a committed shipper's Transportation Service Agreement
Cromer Terminal	Enbridge Pipelines Inc.'s existing pipeline terminal, located at NE 17-9-28 W1M, near Cromer, Manitoba
CSA	Canadian Standards Association
CTKFN	Carry the Kettle First Nation
Deactivation Activities	proposed deactivation of the 354.6 metre long segment of Line EX-02 between the proposed Bakken Pump Station and Enbridge Pipelines (Westspur) Inc.'s existing Steelman Terminal
EA	environmental assessment



EAE	Enhanced Aboriginal Engagement
ECFG	Enbridge Commodity Forecasting Group
Enbridge Bakken	Enbridge Bakken Pipeline Company Inc.
Enbridge Westspur	Enbridge Pipelines (Westspur) Inc.
EPI	Enbridge Pipelines Inc.
EPI Mainline	Enbridge Pipelines Inc.'s existing pipeline system in Canada, which extends approximately 2,306 kilometres from Edmonton, Alberta, to Montreal, Québec
EPP	Environmental Protection Plan
ESR	Environmental Screening Report
FSIN	Federation of Saskatchewan Indian Nations
GDPP	for any year, the average annual Gross Domestic Product Implicit Price Index published by Statistics Canada in March (Catalogue No. 13-001-XPB "National Income and Expenditure") for the immediately preceding year
ha	hectare(s)
HDD	horizontal directionally drilled
IMP	Integrity Management Program
Intervenor	someone with an interest in a proposed project and applies to formally participate in the hearing and may present evidence, question other witnesses or give final argument
km	kilometre(s)
Line EX-02	the Enbridge Pipelines (Westspur) Inc.-owned Canadian portion of the existing 137.4 kilometre long pipeline which transports crude oil from Berthold, North Dakota, to Steelman Terminal near Steelman, Saskatchewan
m	metre(s)
mm	millimetre(s)
m <sup>3</sup> /d	cubic metre(s) per day
MB	Manitoba
MDWS	Manitoba Department of Water Stewardship

MPMO	Major Projects Management Office
MT	Montana
Muse	Muse, Stancil & Co.
ND	North Dakota
NEB Act	<i>National Energy Board Act</i>
NPS	nominal pipe size (in inches)
OD	outside diameter
OMFN	Ocean Man First Nation
ON	Ontario
OPR-99	<i>Onshore Pipeline Regulations, 1999</i>
PFP	Participant Funding Program
PRC	Proposed Regulatory Change
PRNFN	Pheasant Rump Nakota First Nation
Project	proposed Bakken Pipeline Project Canada, in all its parts
Project Description	a description of a proposed project filed with the National Energy Board and the Major Projects Management Office, in advance of a formal application, in order to initiate pre-application activities, such as the environmental assessment process under the <i>Canadian Environmental Assessment Act</i>
Reasons	Reasons for Decision
RM	Rural Municipality
RoW	right-of-way
RPFN	Red Pheasant First Nation
SARA	<i>Species at Risk Act</i>
SCADA	supervisory control and data acquisition
Section 52 Facilities	collectively, the proposed Bakken Pipeline and associated above-ground block valve sites, as well as the operation of Line EX-02
Section 58 Facilities	collectively, the proposed Bakken Pump Station and proposed facilities within the confines of Enbridge Pipelines Inc.'s existing Cromer Terminal



SFN	Sakimay First Nation
SK	Saskatchewan
Steelman Terminal	Enbridge Pipelines (Westspur) Inc.'s existing pipeline terminal, located at NE 8-4-5 W2M, near Steelman, Saskatchewan
TFCC	Treaty Four Council of Chiefs
TLE	Treaty Land Entitlement
TLU	traditional land use
TSA	Transportation Service Agreement
TWS	temporary workspace
Uncommitted Toll	the charge for service provided for uncommitted, or spot, volumes
US	United States
WBFN	White Bear First Nation

## Recital and Appearances

**IN THE MATTER OF** the *National Energy Board Act* (NEB Act) and the Regulations made thereunder;

**IN THE MATTER OF** an application made under file number OF-Fac-Oil-E256-2010-01-02 by Enbridge Bakken Pipeline Company Inc. (Enbridge Bakken), on behalf of Enbridge Bakken Pipeline Limited Partnership, dated 17 January 2011, for the Bakken Pipeline Project Canada (the Project), which is comprised of the following requests:

- leave, pursuant to paragraph 74(1)(b) of the NEB Act, to purchase Line EX-02 from its current owner, Enbridge Pipelines (Westspur) Inc. (Enbridge Westspur);
- issuance of such Orders under the NEB Act as may be necessary to effect the transfer of Line EX-02;
- issuance of a Certificate of Public Convenience and Necessity to Enbridge Bakken, pursuant to section 52 of the NEB Act, authorizing the construction and operation of the 123.4 km long Bakken Pipeline and its associated facilities, as well as the operation of Line EX-02;
- issuance of an Order, pursuant to section 21 of the NEB Act, to amend Order XO-W2-2-96, to reflect the transfer of Line EX-02;
- issuance of an Order, pursuant to section 44 of the *Onshore Pipeline Regulations, 1999*, authorizing the deactivation of the segment of Line EX-02 between the existing Enbridge Westspur Steelman Terminal and the proposed Bakken Pump Station;
- issuance of an Order, pursuant to section 58 of the NEB Act, authorizing the construction and operation of the Bakken Pump Station and facilities at the existing Enbridge Pipelines Inc. Cromer Terminal, and exempting these facilities from the provisions of paragraphs 30(1)(b), 31(c), 31(d) and sections 33 and 47 of the NEB Act;
- approval under Part IV of the NEB Act for the proposed tolling methodology for the Project and for status as a Group 2 regulated company; and
- such further and other relief as Enbridge Bakken may request or the National Energy Board (NEB or Board) may consider appropriate pursuant to section 20 of the NEB Act.

As part of this application, Enbridge Westspur requested the following:

- leave, pursuant to paragraph 74(1)(a) of the NEB Act to sell Line EX-02;
- issuance of such Orders under the NEB Act as may be necessary to reflect the transfer of Line EX-02; and
- such further and other relief as Enbridge Westspur may request or the Board may deem appropriate pursuant to section 20 of the NEB Act.



**AND IN THE MATTER OF** NEB Hearing Order OH-01-2011 dated 16 March 2011;

**HEARD** in Regina, Saskatchewan, on 4 and 5 October 2011;

**BEFORE:**

L. Mercier	Presiding Member
R. R. George	Member
G. A. Habib	Member

**Appearances**

**Participant**

**Witnesses**

L. Estep  
R. Salamucha  
F. Durnford

Enbridge Ba'ken

M. Sitek  
W. D. Armstrong  
N. Earnest  
F. Gazie  
J. Honda-McNeil  
D. Archibald  
L. Parkin  
T. Lyne  
R. Rice  
G. Henningsen  
D. Davidson  
  
Tribal Chief G.  
Panipekeesick  
  
Chief B. Standingready

J. Shockey      Treaty Four Council of Chiefs  
                         (TFCC)

J. Howe      White Bear First Nation

W. Celis      Saskatchewan Ministry of Energy and Resources

P. Johnston      NEB  
J. Ng

**Oral Statements**

W. Weaver      Manitoba Department of Water Stewardship

**Written Arguments**

Carry the Kettle First Nation

TFCC





## Chapter 1

### Disposition

---

Having considered and weighed all of the evidence before it, the National Energy Board (NEB or the Board) finds that the Bakken Pipeline Project Canada (the Project), as proposed by Enbridge Bakken Pipeline Company Inc. (Enbridge Bakken), on behalf of Bakken Pipeline Limited Partnership, is and will be required by the present and future public convenience and necessity. The Board made its determination under the *Canadian Environmental Assessment Act* (CEA Act) that the Project is not likely to cause significant adverse environmental effects. The Board will, subject to Governor-in-Council approval, issue a Certificate of Public Convenience and Necessity (Certificate) for the Section 52 Facilities, incorporating the terms and conditions found in Appendix III of these Reasons for Decision (Reasons). This is pursuant to Part III of the *National Energy Board Act* (NEB Act).

The Board grants Enbridge Bakken exemption Order XO-E256-007-2011, pursuant to section 58 of the NEB Act, authorizing the construction and operation of a new pump station (the Bakken Pump Station) and facilities within the confines of the existing Enbridge Pipelines Inc. (EPI) Cromer Terminal. The Board grants Enbridge Bakken exemption from paragraphs 31(c) and 31(d), and section 33 of the NEB Act, subject to the conditions contained in the Order. The Board does not grant Enbridge Bakken exemption from the provisions of paragraph 30(1)(b) and section 47 of the NEB Act. This Order will only come into effect upon the Board's issuance of the Certificate for the Project.

The Board grants leave pursuant to paragraphs 74(1)(a) and 74(1)(b) of the NEB Act for Enbridge Pipelines (Westspur) Inc. (Enbridge Westspur) to sell and for Enbridge Bakken to purchase existing Line EX-02, and grants Order MO-26-2011 to that effect.

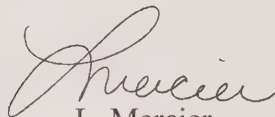
With respect to Enbridge Bakken's request under section 21 of the NEB Act for an Order to amend Order XO-W2-2-96 to reflect the transfer of ownership of Line EX-02, the Board advises Enbridge Bakken to notify the Board when the transaction is completed. At that time, the Board will take the appropriate steps to amend Order XO-W2-2-96.

The Board also grants Order MO-25-2011, pursuant to section 44 of the *Onshore Pipeline Regulations, 1999* (OPR-99), authorizing the deactivation of the segment of Line EX-02 between the existing Enbridge Westspur Steelman Terminal and the proposed Bakken Pump Station, subject to the completion of the transfer of Line EX-02.

All of the above-noted Board-issued Orders are found in Appendix II of these Reasons.

The Board approves Enbridge Bakken's proposed tolling methodology. The Board also concludes that it is appropriate for Enbridge Bakken to be designated as a Group 2 company, as requested.

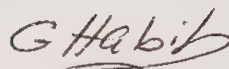
The ensuing chapters constitute the Board's Reasons in respect of Enbridge Bakken's 17 January 2011 application for the Project, as heard by the Board in the OH-01-2011 proceeding.



L. Mercier  
Presiding Member



R. R. George  
Member



G. A. Habib  
Member

Calgary, Alberta  
December 2011



## Chapter 2

# Introduction

---

### 2.1 The Application

On 17 January 2011, Enbridge Bakken, on behalf of Enbridge Bakken Pipeline Limited Partnership, applied to the Board for authorization to construct and operate the Project.

The Project would transport crude oil from the Bakken Formation in North Dakota (ND) and Montana (MT) to refinery markets in North America via a connection with the existing EPI Mainline at its Cromer Terminal near Cromer, Manitoba (MB).

The Project includes the acquisition and operation of the existing 33.7 kilometre (km) long Line EX-02<sup>1</sup>, which is currently owned by Enbridge Westspur, as well as the construction and operation of a new 123.4 km long, 406.4 millimetre (mm) [nominal pipe size (NPS) 16] outside diameter (OD) crude oil pipeline (including above-ground block valve sites) between Steelman, Saskatchewan (SK), and Cromer, MB (the Bakken Pipeline). The Bakken Pipeline would serve as an extension to Line EX-02. The Bakken Pump Station would be constructed at the Bakken Pipeline's western endpoint near Steelman, SK. Enbridge Bakken would deactivate the short segment of Line EX-02 between the proposed Bakken Pump Station and Enbridge Westspur's Steelman Terminal. At the Bakken Pipeline's eastern endpoint, a pig receiving trap would be installed at EPI's Cromer Terminal.

Approximately 46.1 km of the Bakken Pipeline would require new right-of-way (RoW) that is non-contiguous with existing linear disturbances. Along the entire length of this pipeline, a permanent 30 metre (m) wide RoW would be required with 10 m of temporary workspace (TWS), as necessary. Additional TWS would be required on a site-specific basis at highway, road, railway, pipeline and watercourse crossings, as well as at other locations to accommodate construction activities. Some temporary infrastructure (e.g., staging areas) would be required during construction and a new permanent access road would be needed for the Bakken Pump Station.

Construction of the Bakken Pump Station and facilities at EPI's Cromer Terminal is scheduled to commence during quarter two of 2012. Pipeline construction is scheduled to occur during quarter three of 2012. Enbridge Bakken anticipates that the Project, as a whole, would be operational in the first quarter of 2013.

Under the NEB Act, the Project requires a Certificate under section 52 (for the Bakken Pipeline, valve sites and operation of Line EX-02), an Order under section 58 (for the Bakken Pump Station

---

1 Line EX-02 represents the Canadian portion of the 137.4 km long, 323.9 millimetre (NPS 12) outside diameter pipeline which currently transports crude oil from Berthold, ND, to Enbridge Pipelines (Westspur) Inc.'s Steelman Terminal near Steelman, Saskatchewan. The construction and operation of this line was authorized under Board Order XO-W2-2-96, dated 11 January 1996.

and facilities at Cromer Terminal) and leave under paragraphs 74(1)(a)<sup>2</sup> and (b) [for the sale and purchase of Line EX-02]. An authorization under section 44 of the OPR-99 is also required (for the Line EX-02 segment deactivation). In addition, Enbridge Bakken has also requested Board approval of its tolling methodology and for status as a Group 2 regulated company.

The map in Figure 2-1 provides an overview of the Project and its location.

## **2.2 OH-01-2011 Hearing Process**

### **2.2.1 NEB Hearing Order and Oral Hearing Process**

On 16 March 2011, the Board issued Hearing Order OH-01-2011, which established the process for the Board's consideration of the Project application. The Hearing Order included the List of Issues that the Board proposed for consideration during its assessment of the application. The Board issued a revised List of issues on 16 May 2011 following comments received on the List of Issues. The revised List of Issues is included in Appendix I of these Reasons.

The oral public hearing for the Project, pursuant to Hearing Order OH-01-2011, was held in Regina, SK from 4 to 5 October 2011.

### **2.2.2 Environmental Assessment (EA)**

Since the Project requires a Certificate under section 52 of the NEB Act and an Order under section 58 of the NEB Act, an EA under the CEA Act was triggered. Given that the Bakken Pipeline would not require more than 75 km of new RoW, as defined in the CEA Act *Comprehensive Study List Regulations*, the Project was subject to a screening level of EA. The scope of the EA also considers the various other activities that, on their own, would not have triggered an EA under the CEA Act (e.g., Line EX-02 segment deactivation).

On 1 November 2011, the Board released a draft Environmental Screening Report (ESR) for public comment. The final ESR considers the comments received on the draft ESR and provides the views of the Board on environmental and socio-economic matters covered under the CEA Act, as well as the Board's CEA Act determination.

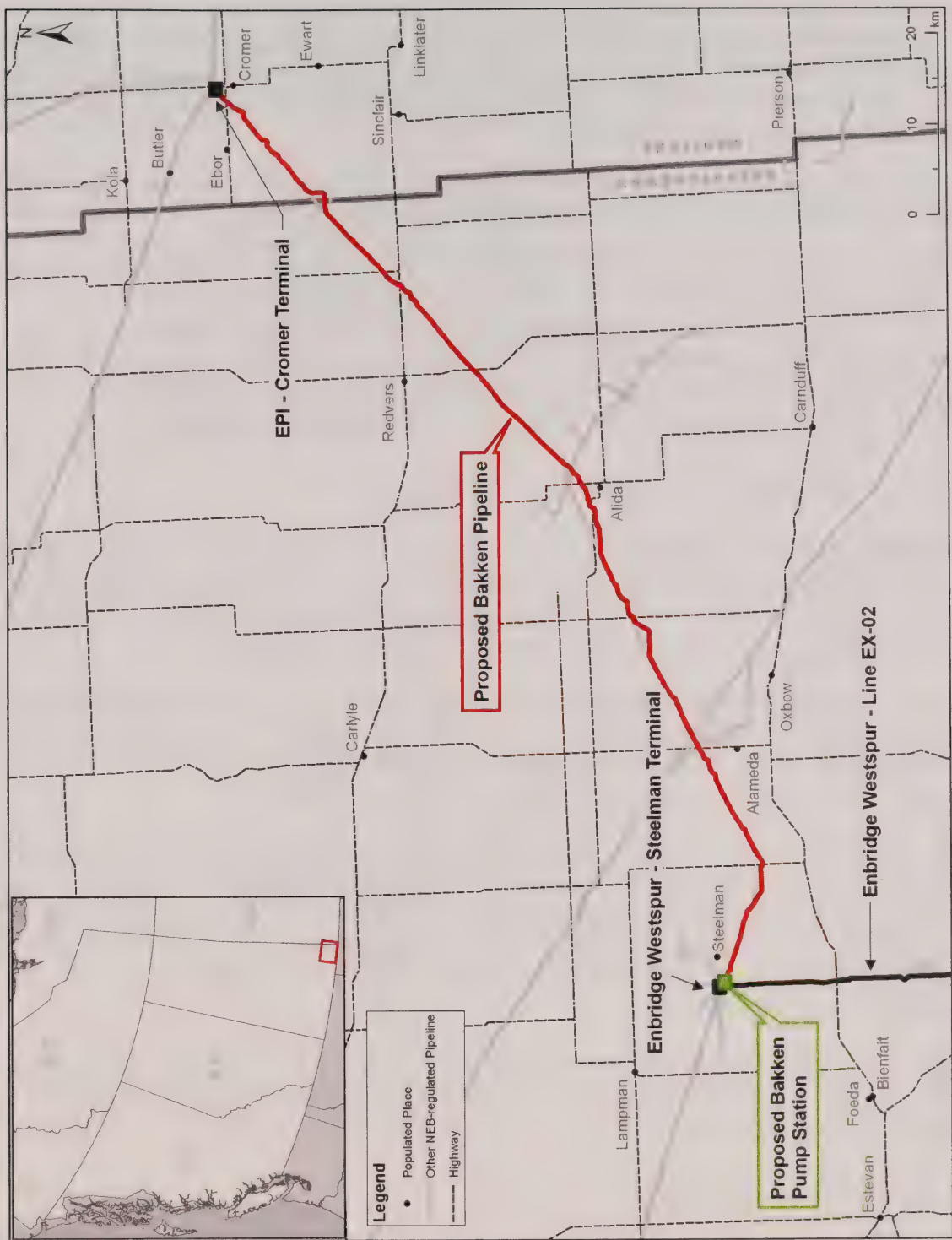
Further discussion about environmental matters can be found in Chapter 9 of these Reasons. The final ESR is attached as Appendix IV.

---

<sup>2</sup> Leave under paragraph 74(1)(a) to sell Line EX-02 was requested by Enbridge Westspur. Once the transaction is complete, pursuant to section 21 of the NEB Act, the Board would amend Order XO-W2-2-96 to reflect the change in ownership.



**Figure 2-1  
Project Overview**



### **2.2.3 Life Cycle Approach**

In considering the Project, the Board used a life cycle approach. All issues and concerns before the Board were considered in the context of the Project (i.e., design, planning, construction, operation, decommissioning and abandonment). The Board also considered its various regulatory roles, such as application assessment and post-decision condition compliance, with respect to each stage in the Project's life cycle.

### **2.2.4 Major Projects Management Office (MPMO)**

In 2008, the federal government established the MPMO to improve the performance of the Canadian regulatory system for major natural resource projects. An important part of the MPMO's work is to provide overarching project management and accountability for major resource projects, such as this Project. With respect to Aboriginal Crown consultation for the Project, the MPMO has indicated that the government will rely on the Board's process, to the extent possible, in discharging any Crown duty to consult Aboriginal groups.

### **2.2.5 Participant Funding**

The NEB administers a Participant Funding Program (PFP) which provides financial assistance to support the timely and meaningful engagement of individuals, Aboriginal groups, landowners, incorporated non-industry not-for-profit organizations or other interest groups who seek to intervene in the NEB's oral hearing process for facilities applications.

On 30 December 2010, the NEB made available \$75,000 under its PFP in order to facilitate participation in the regulatory process for the Project. The deadline to submit an application for funding was 28 January 2011. Twelve applications were received, mostly from Aboriginal groups, with a total request of over \$600,000.

Following a review of the requests by the Funding Review Committee, the following eight applicants were awarded funding: Yorkton Tribal Council (on behalf of Treaty Four Council of Chiefs [TFCC]), Federation of Saskatchewan Indian Nations (FSIN), Carry the Kettle First Nation (CTKFN), Métis Nation – Saskatchewan, Eastern Region III, Ocean Man First Nation (OMFN), Pheasant Rump Nakota First Nation (PRNFN), Sakimay First Nation (SFN) and White Bear First Nation (WBFN).

More details on the Board's allocation of funds under the PFP for the Project can be found at the following link: [http://www.neb-one.gc.ca/clf-nsi/rthnb/pblcprtcptn/prtcptntfndngprgrm/llctnfnd\\_bkknpplnprjct-eng.html](http://www.neb-one.gc.ca/clf-nsi/rthnb/pblcprtcptn/prtcptntfndngprgrm/llctnfnd_bkknpplnprjct-eng.html)

### **2.2.6 The Public Interest**

In reviewing an application, the Board must consider whether the applied-for facilities are in the overall Canadian public interest. In doing so, the Board must, after carefully weighing all of the evidence in the proceeding, exercise its discretion in balancing the interests of a diverse public.



The Board has described the public interest in the following terms:

*The public interest is inclusive of all Canadians and refers to a balance of economic, environmental, and social interests that changes as society's values and preferences evolve over time. The Board estimates the overall public good a project may create and its potential negative aspects, weighs its various impacts, and makes a decision<sup>3</sup>.*

In making its determination regarding public convenience and necessity, the Board must rely only on the facts that are established to its satisfaction through the hearing process, and must also proceed in compliance with the principles of natural justice.

---

3 *Pipeline Regulation in Canada: A Guide for Landowners and the Public (Revised 2010)*, NEB, Page 1.

## Chapter 3

# Economic Feasibility

---

In making its determination on the economic feasibility of an oil pipeline and related facilities, the Board assesses the need for the pipeline, the likelihood of the pipeline being used at a reasonable level over its economic life and the likelihood of the tolls being paid. To make this determination, the Board considers the supply of oil that would be available for transportation on the pipeline, any transportation contracts underpinning the pipeline, and the availability of adequate markets to receive the product(s) to be delivered by the pipeline.

The Board also considers other commercial impacts of the pipeline and facilities, an applicant's ability to finance the construction and ongoing operation and maintenance of the pipeline and facilities, and the project's effects on any other relevant matters of public interest.

Matters relating to tolls and tariffs are discussed in Chapter 4.

### 3.1 Crude Oil Supply

#### *Views of Enbridge Bakken*

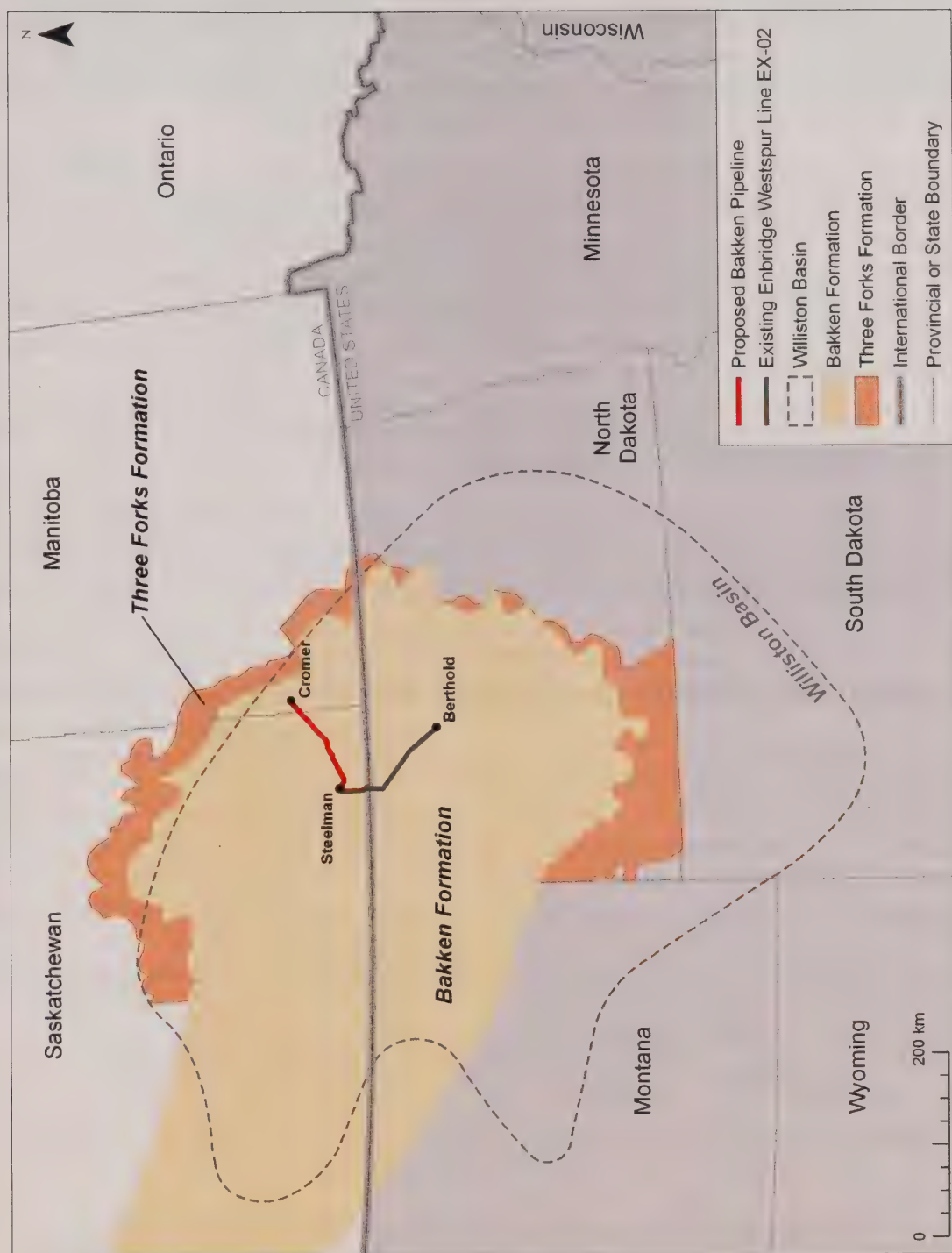
The applied-for facilities are in response to shippers' transportation needs with regard to increasing levels of crude oil production, sourced predominantly from the Bakken Formation and Three Forks Formation situated in parts of MT and ND in the midwestern United States (US). Figure 3-1 provides an overview of the Bakken and Three Forks production area.

Enbridge Bakken submitted estimates of crude oil reserves, production and the sensitivity of production to changes in the oil price. Table 3-1 provides a summary of the remaining reserves in the Bakken and Three Forks Formations within the Project area. In its Spring 2011 forecast, Enbridge Bakken estimated reserves to be 11.8 billion barrels. Enbridge Bakken confirmed that these estimates pertained only to the Bakken and Three Forks Formations located south of the Canada/US border.

**Table 3-1**  
**2008, 2010 and 2011 Reserves Estimates (in billions of barrels)**

	<b>April 2008</b> <b>(US Geological Survey)</b>	<b>December 2010</b> <b>(Enbridge Commodity</b> <b>Forecasting Group [ECFG])</b>	<b>Spring 2011</b> <b>(ECFG)</b>
Bakken	4.1	5.5	7.6
Three Forks	0.0	3.6	4.2
Total	4.1	9.1	11.8

**Figure 3-1**  
**Bakken and Three Forks Production Area**



Source: Modified from Enbridge Bakken's Project application, Volume I (Filing ID: A1X1U4), Chapter 10—Economics (originally sourced from the NID Geological Service)



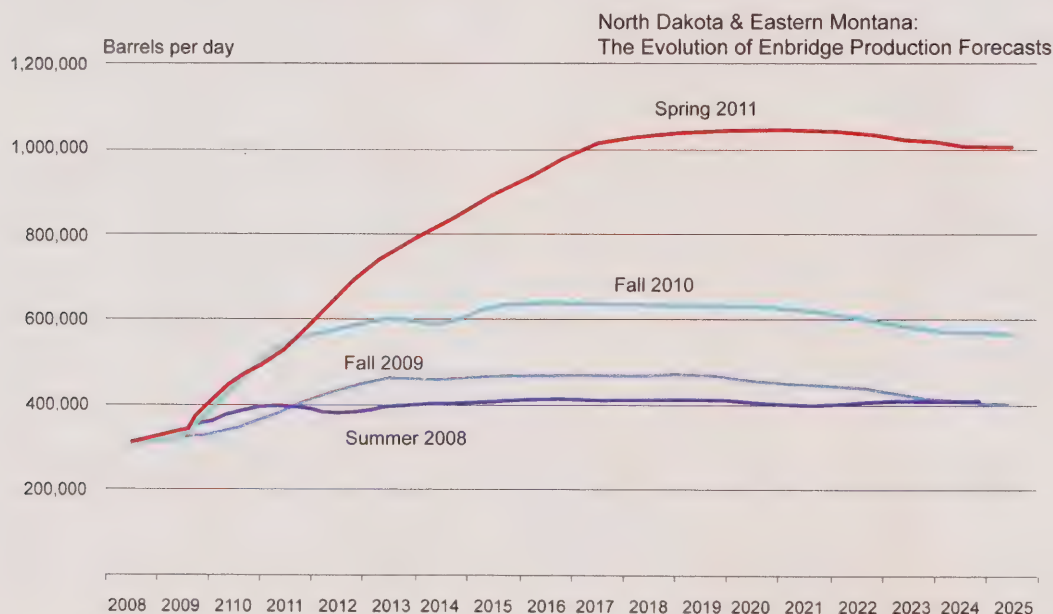
Enbridge Bakken stated that the Bakken Pipeline would transect the Bakken portion of the Williston Basin in SK and MB. As a result, in the infancy of Project planning, it approached Canadian Shippers<sup>4</sup> to determine their interest in having a Steelman delivery and receipt point for the Bakken Pipeline. According to Enbridge Bakken, Canadian Shippers in that area felt that the existing Enbridge Westspur system could best serve their needs and; therefore, they were not interested in a connection to Enbridge Bakken's proposed facilities.

Enbridge Bakken further submitted that its future Bakken production forecasts in SK and MB and information received from shippers suggested that, with the completion of the expansion of the Enbridge Westspur system, there would be sufficient capacity for shippers in the region. Enbridge Bakken also noted that there are other competitive pipelines in the region which are able to provide capacity. Enbridge Bakken stated that, if there is interest from Canadian Shippers in the future and, if capacity on the Bakken Pipeline exists, it would be willing to consider a connection for those shippers onto its system.

As part of its reserves assessment, Enbridge Bakken used a recovery factor of 3.5% for both the Bakken Formation and the Three Forks Formation.

Figure 3-2 sets out the evolution of crude oil production forecasts for the Project area. The Spring 2011 forecast estimates that production will reach about 87 400 cubic metres per day (m<sup>3</sup>/d) [550,000 barrels per day (b/d)] in 2011 and peak at just over 159 900 m<sup>3</sup>/d (1 million b/d) in 2020.

**Figure 3-2**  
**Evolution of Enbridge Production Forecasts for ND/Eastern MT Region**



Source: Enbridge Bakken's revised response to NEB information request # 1.4 (Filing ID: A2C0J6) [(originally sourced from ECFG)]

<sup>4</sup> A Canadian Shipper means any entity that has an agreement with a pipeline company to transport oil or any other hydrocarbon, and that will transfer that product to the pipeline company for transportation at a receipt point located in Canada.

Enbridge Bakken estimates that a 25% reduction in oil price from the base price of \$US 90 per barrel could result in a reduction in daily production in the range of 14 300 to 19 900 m<sup>3</sup>/d (90,000 to 125,000 b/d) [21 to 26%] for the entire region. Enbridge Bakken stated that this estimate is for all of western ND and eastern MT for the years 2011 through 2025. It stated that the Bakken Expansion Program<sup>5</sup> remains viable under this reduced crude production outlook.

## 3.2 Markets

### *Views of Enbridge Bakken*

In support of its assessment of the potential markets for Bakken crude, Enbridge Bakken submitted a report by Muse, Stancil & Co. (Muse), dated July 2010, entitled *Market Analysis for North Dakota Crude for Enbridge*. The report is stated to provide Muse's independent overview of the crude oil markets in the US and Canada that could be accessed by the Enbridge Bakken pipeline system. In addition to the Muse report, Enbridge Bakken also submitted Muse's forecast of crude oil disposition in the intended markets for Bakken crude oil, as well as a production forecast of Bakken and Canadian oil production from EPI and the Canadian Association of Petroleum Producers, respectively.

According to the Muse report, Bakken crude oil could notionally flow in three directions: west to the relatively small US Rockies refinery market by third party pipelines; east through EPI's Mainline System to the sizable refinery centres in the US Midwest and Ontario (ON); or south to the Mid-Continent market by rail. Access to the Mid-Continent market could also be achieved indirectly through the EPI's Mainline to Chicago, and then through the Spearhead pipeline to Cushing, Oklahoma.

For its demand analysis, Muse divided the US Midwest market into four refinery submarkets: Northern Tier, Chicago, Detroit/Toledo and Lower Midwest. Combined, these submarkets, plus the Mid-Continent submarket, had a 2009 total refining capacity of nearly 604 100 m<sup>3</sup>/d (3.8 million b/d). In addition, the ON/Pennsylvania submarket includes refineries in the Sarnia, ON, region and the Warren Refinery in Pennsylvania, which had a total 2009 refinery capacity of 85 200 m<sup>3</sup>/d (536,000 b/d). For each submarket, Muse indicated the location and capacity of each operating refinery, and their estimated light crude oil runs for 2009. Muse also discussed the sources of crude oil supply for the refineries in each submarket, the pipelines that allow oil movements between each submarket and the demand prospects of Bakken crude oil in each submarket. The total refining capacity for the US Midwest, Mid-Continent and ON/Pennsylvania markets in 2009 was estimated by Muse as 684 600 m<sup>3</sup>/d (4.3 million b/d). Muse also estimated that the total refinery demand for the US Midwest, Mid-Continent and ON/Pennsylvania markets in 2010 was approximately 609 100 m<sup>3</sup>/d (3.831 million b/d).

Muse indicated that the refinery demand in the US Midwest would not change significantly from 2010 to 2025, with the exception of some refinery expansions (Tesoro in Mandan, ND; WRB in Wood River, Illinois; Valero in Sunray, Texas) and some upgrading projects (BP in Whiting,

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5 A series of incremental projects to be undertaken by EPI and its affiliates in Canada and the US, designed to meet shippers' transport needs in stages to transport crude oil from the Bakken Formation to market through the EPI Mainline.



Indiana and Marathon in Detroit, Michigan). These capacity expansions add up to 13 500 m<sup>3</sup>/d (85,000 b/d) of crude oil refining capacity by 2013. Enbridge Bakken also submitted that the total expected growth in ON refinery demand between 2011 and 2020 is estimated at 11 900 m<sup>3</sup>/d (75,000 b/d).

#### *Views of Parties*

No party has raised any concerns about the information provided by Enbridge Bakken regarding Muse's demand projections.

### **3.3 Transportation and Throughput**

#### *Views of Enbridge Bakken*

Enbridge Bakken indicated that the Bakken Pipeline has firm commitments from shippers for 15 900 m<sup>3</sup>/d (100,000 b/d), which represents 68% of the nominal pipeline capacity (23 600 m<sup>3</sup>/d [148,500 b/d]) for an average contract duration of 9.25 years. Enbridge Bakken also supplied a forecast of the volumes of Bakken crude oil that would be available for transportation on the Bakken Pipeline, based on the production forecast for the Williston Basin and an estimation of the oil that would be moved by other transport options available in ND and eastern MT, including existing pipelines and volumes transported to the Mandan refinery. According to this forecast, oil supplies from this region could grow from approximately 12 900 m<sup>3</sup>/d (80,000 b/d) in 2010 to 63 600 m<sup>3</sup>/d (400,000 b/d) in 2013, and would peak at 108 700 m<sup>3</sup>/d (684,000 b/d) in 2022, before falling gradually to 102 700 m<sup>3</sup>/d (646,000 b/d) in 2025. Enbridge Bakken anticipates that volumes of crude oil, beyond the throughput already committed by shippers, would be transported by the Bakken Pipeline in the future.

Enbridge Bakken stated that the EPI Mainline downstream of Cromer Terminal currently has a total light crude oil capacity of approximately 172 500 m<sup>3</sup>/d (1,085 million b/d). The average spare capacity for the last two years (January 2009 to March 2011) has been approximately 63 600 m<sup>3</sup>/d (400,000 b/d). Enbridge Bakken anticipates having enough capacity and flexibility in the EPI Mainline system to receive and transport the volumes expected through the Project.

#### *Views of Parties*

No party has raised any concerns with respect to Enbridge Bakken's throughput forecast for the Project.

### **3.4 Ability to Finance**

Enbridge Bakken estimated that the capital cost of the applied-for Project is \$180.1 million and that it would obtain the funds required for construction of the Project from Enbridge Income Fund and Enbridge Income Fund Holdings Inc., which would be invested through intercompany transactions to Enbridge Bakken. Enbridge Income Fund would fund these requirements through a combination of internally-generated cash flows and an existing bank credit facility, as well as with funds from term debt from Canadian capital markets. It stated that Enbridge Income Fund Holdings Inc. can obtain financing through the issuance of equity in Canadian capital markets.



Enbridge Bakken indicated that the Project would be decommissioned and/or abandoned in accordance with all applicable regulatory requirements at the time of decommissioning and/or abandonment. Enbridge Bakken stated that it would comply with the filing requirements and deadlines as set out in the Board's RH-2-2008 Reasons<sup>6</sup>.

### *Views of Parties*

No party has raised any concerns with Enbridge Bakken's ability to finance the Project.

### *Views of the Board*

One of the aspects that the Board considered in its assessment of the need for the Project was the existence of markets to absorb the crude oil volumes that would be delivered by the Bakken Pipeline.

The Board notes that none of the Intervenor's in the hearing process questioned Enbridge Bakken's evidence regarding the market size and its capacity to take the volumes of crude oil that would be transported by the Bakken Pipeline. The Board is satisfied that there is an adequate market to absorb such volumes.

The Board is also satisfied with the evidence provided by Enbridge Bakken regarding the future crude oil supplies that would potentially be available for the Bakken Pipeline and with respect to the existence of commercial commitments for a significant amount of the pipeline capacity.

The Board notes that technological advancements in drilling and exploitation, as well as improved understanding of the resource potential of the Bakken Formation and the Three Forks Formation in ND and western MT have resulted in higher resource assessments and rapidly growing supply capability. The Board recognizes that there are uncertainties associated with the forecasts of crude oil supply available to the Bakken Pipeline; however, it finds Enbridge Bakken's estimates of reserves and supply projections for this region to be reasonable. The Board notes that Enbridge Bakken's supply forecast was not challenged.

The Board is of the view that there is enough commercial interest to support the use of the Bakken Pipeline during its expected economic life. The Board notes that the Bakken Pipeline would connect to the EPI Mainline and would serve as a continuous, long-term source of supply to eastern Canadian and US Midwest markets, thus maintaining the long-term competitiveness of refineries in those regions. The Board also notes that there is adequate capacity on EPI's Mainline downstream of Cromer

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6 RH-2-2008: Land Matters Consultation Initiative Stream 3 – Financial Issues Related to Pipeline Abandonment (May 2009).

Terminal to handle the volumes that would be delivered by the Bakken Pipeline.

In the Board's view, there will be sufficient oil supply to support the Project during its expected economic life. In making its determination, the Board had regard for the supply available and whether there are sufficient markets for the projected production.

The Board is of the view that Enbridge Bakken has the ability to finance the construction of the Project and to place it in operation. The Board is satisfied that Enbridge Bakken is aware of its obligation to plan for decommissioning and abandonment costs in accordance with the RH-2-2008 Reasons.

With respect to abandonment, the NEB Act requires that an application be submitted if and when facilities are to be abandoned. Enbridge Bakken would be required to comply with the then applicable regulatory requirements.

## Chapter 4

# Tolls and Tariffs

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Enbridge Bakken requested approval under Part IV of the NEB Act of its proposed tolling methodology and for status as a Group 2 regulated company. In assessing a proposed methodology, the Board considers whether the resulting tolls would be just and reasonable, and whether, under substantially similar circumstances and conditions with respect to all traffic of the same description carried over the same route, the tolls would be charged equally to all persons at the same rate. The Board must also be satisfied that the tolling methodology would not result in any unjust discrimination in tolls, service or facilities. In order to make these determinations, the Board considers all relevant factors specific to each application.

Furthermore, and specifically for an oil pipeline, the Board must be satisfied that the pipeline would receive, transport and deliver all oil offered to it for transmission. This requirement is usually referred to as the common carrier obligation where an oil pipeline company is required to offer service to any party wishing to ship oil on its pipeline.

### 4.1 Open Season and Available Capacity

#### *Views of Enbridge Bakken*

Enbridge Bakken held an open season process which resulted in a total of 18 300 m<sup>3</sup>/d (115,000 b/d) [79% of total capacity] in commitments. Enbridge Bakken later revised the level of committed capacity to 15 900 m<sup>3</sup>/d (100,000 b/d). Shippers were given the opportunity to sign Transportation Service Agreements (TSAs) of five- and ten-year terms. Enbridge Bakken stated that the average term of commitments was 9.25 years. In Enbridge Bakken's view, shippers who signed TSAs demonstrated their financial support of the Project and those shippers would be provided "priority access" on the Project up to their committed volumes. Should additional space be required by shippers, Enbridge Bakken indicated that the capacity could be expanded to 51 700 m<sup>3</sup>/d (325,000 b/d).

### 4.2 Access by Canadian Producers

#### *Views of Enbridge Bakken*

Enbridge Bakken indicated that, if a future Canadian Shipper requested service on the Project, it would be willing to consider an agreement for adding a receipt point for that shipper. Enbridge Bakken confirmed that any Canadian producer connecting to the Bakken Pipeline would pay the local toll associated with potential future Canadian receipt points. Enbridge Bakken also stated that it would not differentiate between barrels nominated by a US shipper and those nominated by a Canadian Shipper and that these barrels would still be subject to pro rata apportionment under Enbridge Bakken's rules and regulations. Should new facilities for Canadian Shippers be required in the future, Enbridge Bakken would run an open season for that new service. In its



response to questions from the Board, Enbridge Bakken indicated there are no renewal rights for committed shippers and that these shippers have no preferential access to future capacity.

### **4.3 Tolling Methodology**

#### **4.3.1 Tolls**

##### ***Views of Enbridge Bakken***

Enbridge Bakken noted that it would file an international joint tariff with the Board at a later date.

Enbridge Bakken proposed charging tolls for two types of service: committed service (supported by a TSA) and uncommitted service (not supported by a TSA). The makeup of the Bakken Pipeline's nominal capacity between committed and uncommitted volumes is 79% and 21%, respectively.

#### **4.3.2 Committed Tolls**

##### ***Views of Enbridge Bakken***

The Committed Toll is a two-part toll comprised of a base component and an operating cost component. The base component is designed to recover capital-related costs of the Project. The operating cost component would allocate forecasted operating costs over total throughput volumes. There would be a yearly true-up between forecasted and actual costs.

#### **4.3.3 Uncommitted Tolls**

##### ***Views of Enbridge Bakken***

The Uncommitted Toll would initially be set at a six-cents-per-barrel premium to the highest Committed Toll. Similar to the Committed Toll, the Uncommitted Toll would be subject to an automatic year-to-year adjustment based upon the rate of change of GDPP<sup>7</sup>. Enbridge Bakken stated that the percentage for uncommitted shippers when compared to the weighted average of all Committed Tolls would be approximately 6.9% higher. The Uncommitted Toll is approximately 23.8% higher than the ten-year firm toll for less than 6 359 m<sup>3</sup>/d (40,000 b/d). Enbridge Bakken filed its pro forma TSA during the oral portion of the hearing.

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7 For any year, the average annual Gross Domestic Product Implicit Price Index published by Statistics Canada in March (Catalogue No. 13-001-XPB "National Income and Expenditure") for the immediately preceding year.

#### **4.3.4 Method of Regulation**

##### ***Views of Enbridge Bakken***

Enbridge Bakken submitted that its tolls are negotiated rather than based on a traditional cost of service basis. It further stated that all shippers would have the ability, at all times, to file a complaint with the Board in respect of toll or access disputes. Enbridge Bakken requested that it be regulated as a Group 2 company for the purposes of NEB toll and tariff regulation.

##### ***Views of the Board***

Subsection 71(1) of the NEB Act requires that an oil pipeline company offer service to any party wishing to ship oil on its pipeline. This provision is the foundation of common carrier obligation for NEB-regulated oil pipelines. The Board has indicated in previous decisions that an oil pipeline company meets its common carrier obligations when an open season is properly conducted for new facilities or services, and sufficient capacity is made available to uncommitted volumes.

In this case, the Board notes that an open season was conducted in a fair and transparent manner. Capacity could be expanded to 51 700 m<sup>3</sup>/d (325,000 b/d), subject to a separate regulatory approval. The Board notes that 21% of the Bakken Pipeline's capacity has been reserved for uncommitted shippers and finds this to be reasonable. The Board accepts Enbridge Bakken's commitment that it would give consideration to a request from any Canadian Shipper for a receipt point in Canada. The Board also notes Enbridge Bakken's assurance that, as a common carrier, it would not differentiate between barrels nominated by a US shipper and a Canadian Shipper. The Board concludes that Enbridge Bakken's proposal is consistent with the common carrier obligations set out in subsection 71(1) of the NEB Act.

The Board notes that no party has raised any concerns about the premium for uncommitted shippers. The Board finds that no unjust discrimination would result from the proposed method. In addition, the Board has reviewed the pro forma TSA filed by Enbridge Bakken and took into consideration evidence that there are no renewal rights or preferential access for committed shippers.

The Board recognizes that Enbridge Bakken is operating in a very competitive environment. The Project is considered commercially at-risk, with only a portion of that risk being offset through the existence of long-term transportation contracts. The Board accepts that uncommitted shippers are charged a higher toll than shippers who have signed TSAs.

Enbridge Bakken's proposed methodology for establishing Committed Tolls resulted from negotiations between sophisticated parties and no party has raised any objections in this regard.

Taking into consideration the factors noted above, the Board approves the proposed tolling methodology.

When determining whether a company should be designated as Group 1 or Group 2, the Board has previously considered the size of the facilities, whether transportation services are provided for third parties and whether a pipeline is regulated under the traditional cost of service methodology.

Given that the tolls have been negotiated with Enbridge Bakken's committed shippers, the Board has concluded that it is appropriate for Enbridge Bakken to be designated as a Group 2 company. Pursuant to the Board's letter of 17 November 2009, *Financial Regulation of Pipeline Companies under the Board's Jurisdiction*, Group 2 companies are subject to a lesser degree of financial regulation than Group 1 companies. The financial regulation of Group 2 companies is carried out on a complaint basis with a consequential reduction in financial reporting requirements. Accordingly, Enbridge Bakken is required to include the following wording in its tariff:

*The tolls of Enbridge Bakken are regulated by the National Energy Board on a complaint basis. Enbridge Bakken is required to make copies of tariffs and supporting financial information readily available to interested persons. Persons who cannot resolve traffic, toll and tariff issues with Enbridge Bakken may file a complaint with the Board. In the absence of a complaint, the Board does not normally undertake a detailed examination of Enbridge Bakken's tolls.*



## Chapter 5

# Facilities and Emergency Response Matters

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The Board uses a risk-informed approach in requiring that NEB-regulated facilities and activities are safe and secure from their initial construction through to their eventual abandonment. In consideration of the safety and security of proposed facilities, the Board assesses, at a conceptual level, whether or not the facilities are appropriately-designed for the properties of the product being transported, the range of operating conditions and the human and natural environment where the facilities would be located. Specific considerations include the company's approach to engineering design, integrity management, security and health and safety.

When a company designs, constructs, operates or abandons a pipeline, it must do so in accordance with the NEB's OPR-99, the commitments made during the hearing and the conditions attached to any approval. The OPR-99 references various engineering codes and standards including Canadian Standards Association (CSA) Z662 – Oil and Gas Pipeline Systems. The company is responsible for ensuring that it follows the design, specifications, programs, manuals, procedures, measures and plans developed and implemented by the company in accordance with the OPR-99.

With respect to emergency response matters, the NEB expects companies to develop and implement Emergency Preparedness and Response Programs for all aspects of their operations.

On 24 April 2002, the NEB issued a letter to all oil and gas companies under its jurisdiction setting out its expectations for appropriate and effective Emergency Preparedness and Response Programs.

## 5.1 Description of Facilities

The Project includes the following activities associated with new and existing facilities:

- construction and operation of the Bakken Pipeline: a 123.4 km long<sup>8</sup>, 406.4 mm (NPS 16) OD crude oil pipeline between the Bakken Pump Station near Steelman, SK and Cromer Terminal near Cromer, MB.
- construction and operation of five above-ground block valve sites along the Bakken Pipeline;
- construction and operation of the Bakken Pump Station: a 2.7 hectare (ha) station site near Steelman, SK, which includes two 3,500 kilowatt pump assemblies and variable

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8 This length is representative of the Bakken Pipeline from the property line of the Bakken Pump Station to the property line of Cromer Terminal. The Bakken Pipeline also includes approximately 30.5 m and 560.4 m of pipe within the boundaries of the Bakken Pump Station and Cromer Terminal, respectively.

frequency drives, a pig launcher and receiver, a new sump tank and pump, a drag reducing agent skid and an electrical services building;

- operation of the existing 33.7 km long, 323.9 mm OD Line EX-02 which is located between the Canada/US border and Steelman Terminal;
- construction and operation of a pig receiving trap at Cromer Terminal; and
- deactivation of 354.6 m of Line EX-02 between Steelman Terminal and the Bakken Pump Station.

The Project would be designed to transport crude oil at a maximum operating pressure of 9,930 kilopascals, with an initial capacity of 23 180 m<sup>3</sup>/d (145,800 b/d).

## **5.2 Design, Construction and Operation**

In discharging its regulatory oversight responsibilities, the Board uses a risk-informed compliance verification approach so that companies can identify and manage integrity-related hazards that may impact safety and the environment throughout the life cycle of a project. This life cycle approach follows each project from its design, through construction and operation, until the pipe is abandoned. The adequacy, implementation and effectiveness of a company's commitments are typically verified by the Board through audits, inspections and meetings. In addition, the Board will also perform ongoing monitoring of a company's compliance and incidents. This compliance approach is an integral part of the Board's continuous oversight of a company's pipeline and facilities. Accordingly, the Board will employ its compliance verification approach as a means of verifying that Enbridge Bakken is meeting the commitments outlined in the OH-01-2011 proceeding.

### **5.2.1 Design**

#### ***Views of Enbridge Bakken***

Enbridge Bakken submitted that the Project would be designed, constructed and operated in accordance with CSA Z662, including new requirements contained in CSA Z662-11, and the OPR-99. Programs and procedures for the Project such as the joining program and non-destructive examination of welds would comply with these requirements.

### **5.2.2 Construction**

#### ***Views of Enbridge Bakken***

Enbridge Bakken stated that its contractors would be required to adhere to all local safety regulations, contractor safety manuals, its own corporate safety manuals and EPI's safety manuals. Additionally, contractors would be expected to follow EPI's Contractor Safety Manual (2010).

Enbridge Bakken noted that the minimum installation depth of cover for the Bakken Pipeline would comply with all applicable legislation and codes. At three locations, Enbridge Bakken has

agreed to an increased depth of cover than was originally outlined in its application, in order to address site-specific issues.

The Bakken Pipeline would cross various existing highways, roads, railway lines, third-party pipelines and utility lines. Enbridge Bakken stated that all crossings would be designed and constructed to conform to current NEB regulatory requirements and applicable standards. Enbridge Bakken noted that, as the Project would cross a number of third-party utilities and would be located alongside and contiguous to an existing Enbridge Westspur pipeline RoW and other linear disturbances, Project-specific damage prevention measures are being planned. Enbridge Bakken submitted that, prior to construction, it would consolidate all pipeline damage prevention measures applicable to the Project, and would require all contractors to comply with those measures.

### **5.2.3 Operation**

#### ***Views of Enbridge Bakken***

Enbridge Bakken noted that the Project would be operated in accordance with all applicable regulatory requirements, Certificate conditions, licenses and existing EPI operating requirements. Further, all associated Project facilities would be monitored and operated from an existing EPI control centre. Operation of equipment and facilities would be in accordance with EPI's Operating and Maintenance Procedure Manuals and preventative maintenance program.

Enbridge Bakken would use EPI's supervisory control and data acquisition (SCADA) system to monitor and control the Project. Enbridge Bakken stated that its emergency shut-down systems can be initiated remotely by the control centre. It can also be initiated locally by onsite personnel if any unsafe condition is observed. The existing EPI control centre has a complete back-up control centre.

### **5.2.4 Security**

#### ***Views of Enbridge Bakken***

Enbridge Bakken stated that security management for the Project would be incorporated into the existing security management program and assessment process used for all EPI pipeline systems and facilities.

### **5.2.5 Pipeline Integrity**

#### ***Views of Enbridge Bakken***

Enbridge Bakken stated that it would assess and evaluate operational risks applicable to its pipeline and facilities, which would result in prioritized maintenance activities or projects to ensure its fitness-for-purpose tolerances are maintained. It indicated that the Project would be integrated into EPI's existing Integrity Management Program (IMP).



Enbridge Bakken asserts that there are established procedures for inspecting pressure limiting systems and devices, in EPI's Operating and Maintenance Procedure Manuals.

### ***Views of Parties***

No party has raised concerns with respect to Enbridge Bakken's overall design philosophy for the Project.

## **5.3 Emergency Response**

### ***Views of Enbridge Bakken***

Enbridge Bakken stated that there is a comprehensive Emergency Response Plan in place for all EPI pipelines, which includes preventative measures such as advanced education for the public regarding pipeline crossings and encroachment issues. This plan would be modified to include the Project.

### ***Views of White Bear First Nation***

WBFN expressed that it would like to be notified immediately in the event of any major accident of any kind that would affect the water, land, wildlife or natural habitat in any circumstance that is more than insignificant.

### ***Views of the Board***

The Board is satisfied that the general design of the Project is appropriate for its intended use and that the facilities would be constructed in accordance with standards for design, construction and operation, including the OPR-99 and CSA Z662.

The Board requires Enbridge Bakken to finalize its design, and to construct, install and operate all Project-related facilities in accordance with the specifications, standards and other information referred to in its application or as otherwise agreed to in its related submissions (in Appendix II, see Condition 2 of Order XO-E256-007-2011 and, in Appendix III, Certificate Condition 2). In addition, the Board requires Enbridge Bakken to update its Commitments Tracking Table (in Appendix II, see Condition 4 of Order XO-E256-007-2011 and, in Appendix III, Certificate Condition 4) to reflect commitments made throughout the OH-01-2011 proceeding.

The Board is of the view that construction practices must address safety considerations. To facilitate the NEB's ongoing oversight of Enbridge Bakken's safety plans and performance, the Board requires Enbridge Bakken to submit a Construction Safety Manual for the Project facilities proposed under sections 52 and 58 of the NEB Act (in Appendix II, see Condition 7 of Order XO-E256-007-2011 and, in Appendix III, Certificate

Condition 7). Further, the Board requires Enbridge Bakken to submit a construction schedule for these facilities (in Appendix II, see Condition 9 of Order XO-E256-007-2011 and, in Appendix III, Certificate Condition 15). The Board's oversight of construction would include verification of Enbridge Bakken's compliance with its construction safety program, and the submission of construction progress reports for the Project (in Appendix II, see Condition 12 of Order XO-E256-007-2011 and, in Appendix III, Certificate Condition 18).

The Board notes that the Bakken Pipeline would be constructed alongside and contiguous to an existing Enbridge Westspur pipeline for approximately 77.3 km and that it would cross approximately 186 third-party pipelines. The Board finds Enbridge Bakken's commitment to plan Project-specific damage prevention measures to be appropriate. Further, the Board is satisfied with Enbridge Bakken's commitment to consolidate these measures prior to construction and to require all contractors to comply with them.

The Board notes that the Project would be integrated into EPI's IMP. The Board requires companies to develop and implement an IMP in order to proactively identify and mitigate any potential hazards to pipelines and facilities. The IMP is a continuous improvement process and is applied throughout the lifecycle of a Project. The Board will apply its risk-based compliance verification approach in its oversight of the IMP commitments.

The Board requires Enbridge Bakken to complete a hydrostatic pressure test as a safety validation prior to the operation of its new facilities. The Board also requires Enbridge Bakken to file its field joining and pressure testing programs for these new facilities prior to beginning construction (in Appendix II, see Condition 11 of Order XO-E256-007-2011 and, in Appendix III, Certificate Condition 17).

Enbridge Bakken submitted that security management for the Project would be incorporated into the existing Security Management Program and assessment process used for all EPI pipeline systems and facilities. The Board is of the view that security programs should provide for safe and secure practice in the design, construction, operation and maintenance of a pipeline system. In addition, the Board expects security programs to be in accordance with the OPR-99 and *Proposed Regulatory Change 2010-01*, which outlines the Board's expectations for a Pipeline Security Management Program. The Board requires the filing of the Security Management Plan(s) for the Project (in Appendix II, see Condition 6 of Order XO-E256-007-2011 and, in Appendix III, Certificate Condition 6).

The Board finds that the measures proposed by Enbridge Bakken to deal with emergency preparedness and response are appropriate. With regard to

WBFN, the Board expects that, as part of Enbridge Bakken's Continuing Education Program, it would inform appropriate organizations, including Aboriginal communities, of potential emergency situations involving the pipeline and the safety procedures to be followed in the case of an emergency. The Board requires Enbridge Bakken to file updates to the Emergency Response Manual(s) as they relate to the Project, as a whole (in Appendix III, see Certificate Condition 19).

The Board reminds Enbridge Bakken that an application pursuant to section 47 of the NEB Act for leave to open is required prior to commencing operation of the Project.



## Chapter 6

# Land Matters

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The Board requires applicants to provide a description and rationale for the proposed general routing of a pipeline, the location of associated facilities and the permanent and temporary lands required for a project. The Board also requires a description of the land rights to be acquired, as well as the land acquisition process and the status of land acquisition activities. This provides the Board with information about the company's planned timing of acquisition. Finally, applicants are required to provide the Board with a copy of the notice provided to landowners pursuant to subsection 87(1) of the NEB Act, as well as a copy of the proposed form.

## 6.1 Route Selection

### *Views of Enbridge Bakken*

The Bakken Pipeline would be approximately 123.4 km in length and would be located between the Bakken Pump Station near Steelman, SK, and EPI's Cromer Terminal near Cromer, MB. Enbridge Bakken designed 77.3 km of the route to be constructed alongside and contiguous to the existing Enbridge Westspur pipeline RoW and other linear disturbances. Such a design was intended to minimize incremental environmental and stakeholder impacts while supporting efficient operations and maintenance. The pipeline corridor crosses eight Rural Municipalities (RMs), and most of the corridor is zoned as fee simple agricultural land.

## 6.2 Land Requirements

### 6.2.1 Land Requirements for New RoW

#### *Views of Enbridge Bakken*

In its application, Enbridge Bakken stated that 98.5% of the 205 parcels of land required for the Project are privately-held and the remaining 1.5% is owned by the provincial Crown.

Enbridge Bakken confirmed that new easement agreements were required for the Project in order to obtain a permanent RoW approximately 30 m in width. This includes land rights associated with the block valve sites along the Bakken Pipeline. The total required area for permanent use is estimated to be nearly 359 ha in size, exclusive of waterways and roads.

Enbridge Bakken requires new easement agreements for 46.1 km of new non-contiguous RoW between the Bakken Pump Station and EPI's Cromer Terminal. At the close of the evidentiary portion of the hearing process, Enbridge Bakken had acquired 99.2% of the 135 required Easement Agreements from landowners for tracts of land along this new RoW. Enbridge Bakken had received verbal consent from the current landowner for the remaining 0.8%.

## **6.2.2 Land Requirements for TWS**

### ***Views of Enbridge Bakken***

Enbridge Bakken would require TWS for construction infrastructure (e.g., stockpile sites) along the entire Project, up to 10 m in width, depending on the location. The total combined width of permanent RoW and TWS required for construction would be up to 40 m. Definitive requirements for additional land rights would be identified as the construction planning, engineering and design phases advance. This TWS would be adjacent to both the new Enbridge Bakken and existing Enbridge Westspur pipeline RoWs. The overall estimated area required for this TWS is approximately 169 ha. Agreements with landowners for temporary working rights are currently being negotiated for all required TWS.

## **6.2.3 Land Requirements for Facilities Applied-for under Section 58 of the NEB Act**

### ***Views of Enbridge Bakken***

All new construction and upgrades for the Bakken Pump Station and at Cromer Terminal would take place on lands privately-held by Enbridge Bakken or EPI. Enbridge Bakken would acquire the necessary land rights from Enbridge Pipelines (Saskatchewan) Inc. for the Bakken Pump Station, which would be located directly adjacent to the existing Enbridge Westspur Steelman Terminal.

## **6.2.4 Land Acquisition**

### ***Views of Enbridge Bakken***

Enbridge Bakken has worked with landowners to inform them of the potential impacts of construction and have acquired environmental survey consents from all landowners and occupants. Enbridge Bakken intends to enter into surface lease agreements with affected landowners and occupants, as required, for the block valve sites. In accordance with subsection 87(1) of the NEB Act, 135 notices have been served to affected landowners. A detailed property sketch identifying the proposed pipeline route over lands for each landowner, as well as a copy of the Board's publication entitled *Pipeline Regulation in Canada: A Guide for Landowners and the Public* accompanied each notification package.

### ***Views of Parties***

No party has raised concerns regarding Enbridge Bakken's route selection, land requirements or land acquisition process for the Project.

### *Views of the Board*

The Board finds that designing and constructing the majority of the Enbridge Bakken pipeline route alongside and contiguous to the Enbridge Westspur RoW to be reasonable given that the environmental and socio-economic impacts of the Project would be minimized.

The Board notes Enbridge Bakken's intent to create a 30 m wide permanent RoW and to use an additional 10 m of TWS during construction (combined, a 40 m wide construction RoW). The Board is of the view these RoW widths are necessary to allow for the construction and operation of the new pipeline in a safe and efficient manner, as well as allowing for maximum use of the existing adjacent RoW for construction and operation purposes.

In order to prevent third party mechanical damage to a pipeline, the Board requires Enbridge Bakken to provide confirmation that all third party agreements have been acquired (in Appendix III, see Certificate Condition 14).

The Board finds that Enbridge Bakken's consultation with affected landowners and occupants regarding land acquisition was adequate given the scale and scope of the Project.

The Board also finds that Enbridge Bakken's anticipated requirements for permanent and temporary land rights are satisfactory.



## Chapter 7

# Public Consultation

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The Board's expectations around public consultation are based on the principle that people who may be affected by a regulatory decision, or who have an interest in the outcome, should be given the opportunity to provide relevant information and views to the decision makers before a decision is determined.

In order to realize this goal, the Board expects companies to develop and apply a consultation program that provides interested individuals and groups with clear information early in the process, to focus on matters openly, to include responses into the design of a proposed project and to present information to stakeholders on how and when to contact the Board with any concerns.

### 7.1 Enbridge Bakken's Consultation Program

#### *Views of Enbridge Bakken*

In designing its public consultation program for the Project, Enbridge Bakken assessed potential impacts of the Project to determine the expected levels and areas of public interest. Enbridge Bakken also took into account the type of work to be carried out as part of construction and operations. Enbridge Bakken's consultation program complements public awareness programs currently in place for existing pipeline operations in the area being carried out by EPI. EPI's pre-existing relationship with local landowners and regional stakeholders has been in place for several decades and is viewed as being very positive.

Enbridge Bakken designed and used a three-phase approach for implementing its consultation program for the Project.

Phase 1 began in March 2010 and included face-to-face visits between Enbridge Bakken representatives and directly-affected landowners, residents and tenants along the RoW. These visits included the distribution of Project information packages; discussions of Project components, route and schedule; and the explanation and execution of easement agreements.

Phase 2 began in September 2010 and extended beyond directly-affected landowners, residents and tenants along the RoW to include other potentially-impacted stakeholders. This included hand delivering Project information packages to all adjacent landowners, residents and tenants, along with mail deliveries to communities and RMs traversed by the Project, Members of Parliament and Members of the Legislative Assembly in whose riding Project work is being proposed, as well as to other identified stakeholders. Mail-outs were followed up with in-person presentations at municipal council meetings at each RM traversed by the Project.

Phase 3 was to be undertaken as the Project proceeded. This phase did and would include providing updates to stakeholders at the following times:

- after the regulatory applications have been submitted (to inform of significant details regarding the Project scope or schedule, if any);
- post-regulatory approval (including the expected construction schedule);
- during construction (construction monitors would work closely with landowners to answer questions and address issues with the construction team); and
- post-construction (including notification of the anticipated in-service date).

Enbridge Bakken submitted that it mitigated landowner issues by engaging with concerned individuals to resolve matters related to weed management, increasing depth of cover at site-specific drainage routes, adjusting the pipeline route to reduce potential impacts on farming operations and cleaning equipment prior to RoW entry onto organic farms. Enbridge Bakken expects that public impacts concerning construction noise, dust, traffic and disruptions due to equipment movements would be low for nearby landowners and occupants near the Bakken Pump Station.

### ***Views of the Parties***

The RMs of Antler, Browning, Coalfields and Pipestone submitted letters of support for the Project. The letters highlighted benefits of the Project, such as reduced tanker-truck traffic impacts on local infrastructure (e.g., roads, bridges, etc.), increased road safety, extension of road surface life, decreased costs associated with highway maintenance, and employment opportunities.

Various contacted landowners expressed concerns about compensation issues, frequency of environmental surveys, the use of quad vehicles for environmental surveys, weed management, drainage issues due to depth of cover in specific areas, entry of contaminated equipment onto organic farms and impacts of the route on current farming operations. These issues are discussed in greater detail in the CEA Act ESR (attached as Appendix IV).

### ***Views of the Board***

The Board notes Enbridge Bakken's efforts to identify, engage and consult with potentially-affected stakeholders about the Project. The Board also notes Enbridge Bakken's commitment to continue its consultation activities throughout the lifecycle of the Project.

The Board is of the view that, with the implementation of Enbridge Bakken's proposed standard mitigation measures, landowner concerns can be effectively mitigated or eliminated.

The Board is of the view that the consultation undertaken and proposed by Enbridge Bakken for the Project is appropriate for the scope and scale of the Project.

## Chapter 8

# Aboriginal Matters

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The Board takes Aboriginal interests and concerns into consideration before it makes any decision that could have an impact on those interests. As a quasi-judicial decision-maker, the Board must ensure that its process complies with the principles of fairness and the rules of natural justice. In addition, the Board interprets its responsibilities, including those outlined in the NEB Act, in a manner consistent with the *Constitution Act, 1982*, including section 35, which recognizes and affirms existing Aboriginal and treaty rights of Aboriginal peoples<sup>9</sup>. In meeting its obligations with respect to consultation, the Crown relies on the Board's process to the extent possible, because the process is designed to assess and address, among other considerations, the potential impacts of the Project on Aboriginal and treaty rights.

In order to ascertain that the Board has the necessary evidence before it concerning potential impacts on Aboriginal rights or interests, the Board obtains as much evidence as possible so that it may assess the potential impacts and factor that consideration into its final decision. To do this, the Board has established a process with three key components:

1. As set out in the Board's Filing Manual<sup>10</sup>, project applicants must identify, engage and consult with potentially-affected Aboriginal groups prior to the filing of an application. An applicant is required to hear the concerns of such groups and attempt to address their concerns to the extent possible before filing its application. An applicant must report on this work in its application, including any unresolved Aboriginal concerns. Aboriginal groups are encouraged to engage with applicants so that their concerns may be identified early as there is a greater chance for their concerns to be met before an application is filed.
2. Under the Board's Enhanced Aboriginal Engagement (EAE) initiative (further discussed in Subsection 8.1 of these Reasons), the Board reviews the list of potentially-affected Aboriginal groups identified by an applicant in its Project Description, as filed with the MPMO. The MPMO or the Board may suggest revisions to an applicant's list. The Board sends out a letter to each Aboriginal community or organization on the revised list, informing them of the project, the Board's regulatory role concerning the project, and offering to provide further information on the hearing process. Board staff follow-up, send out information and hold meetings, where requested.
3. The Board encourages Aboriginals with an interest in a project to make their views known directly to the Board by participating in the hearing process. There is a variety of

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9 Further details on the Board's approach in this regard are provided in the Board's letter to Counsel for TFCC, dated 16 June 2011 (Filing ID: A1Z7X9).

10 The NEB's Filing Manual is intended to, among other things, outline the filings needed for most applications within the jurisdiction of the NEB and to provide guidance as to the type of information the Board would typically need to make a decision. It can be found here: <http://www.neb.gc.ca/clf-nsi/rpblctn/ctsndrgltn/flngmnl/flngmnl-eng.html>.



ways through which Aboriginal groups may present their views to the Board (e.g., seeking Intervenor status, filing a letter of comment, making an oral statement). Aboriginal groups can; therefore, choose the level of involvement they want to have in the Board's hearing process. For those who choose to be active Intervenor, the Board has a PFP in place that may assist the parties in participating in the Board's process (see Subsection 2.2 for more details).

## 8.1 The Board's EAE Process

For the Project, the Board conducted its EAE work following the receipt of the Project Description in October 2010. The Board sent a letter to 28 potentially-affected Aboriginal communities and organizations. The letter discussed the Board's hearing process, its PFP and included a summary of the Project.

The Board also carried out additional EAE work between the receipt of Enbridge Bakken's application in January 2011 and April 2011. Six Aboriginal communities and organizations (Métis Nation – Saskatchewan, Eastern Region III; Piapot First Nation; WBFN; Birdtail Sioux First Nation [BSFN]; FSIN; and TFCC) requested Intervenor workshops and information sessions regarding the Board's hearing process and its PFP.

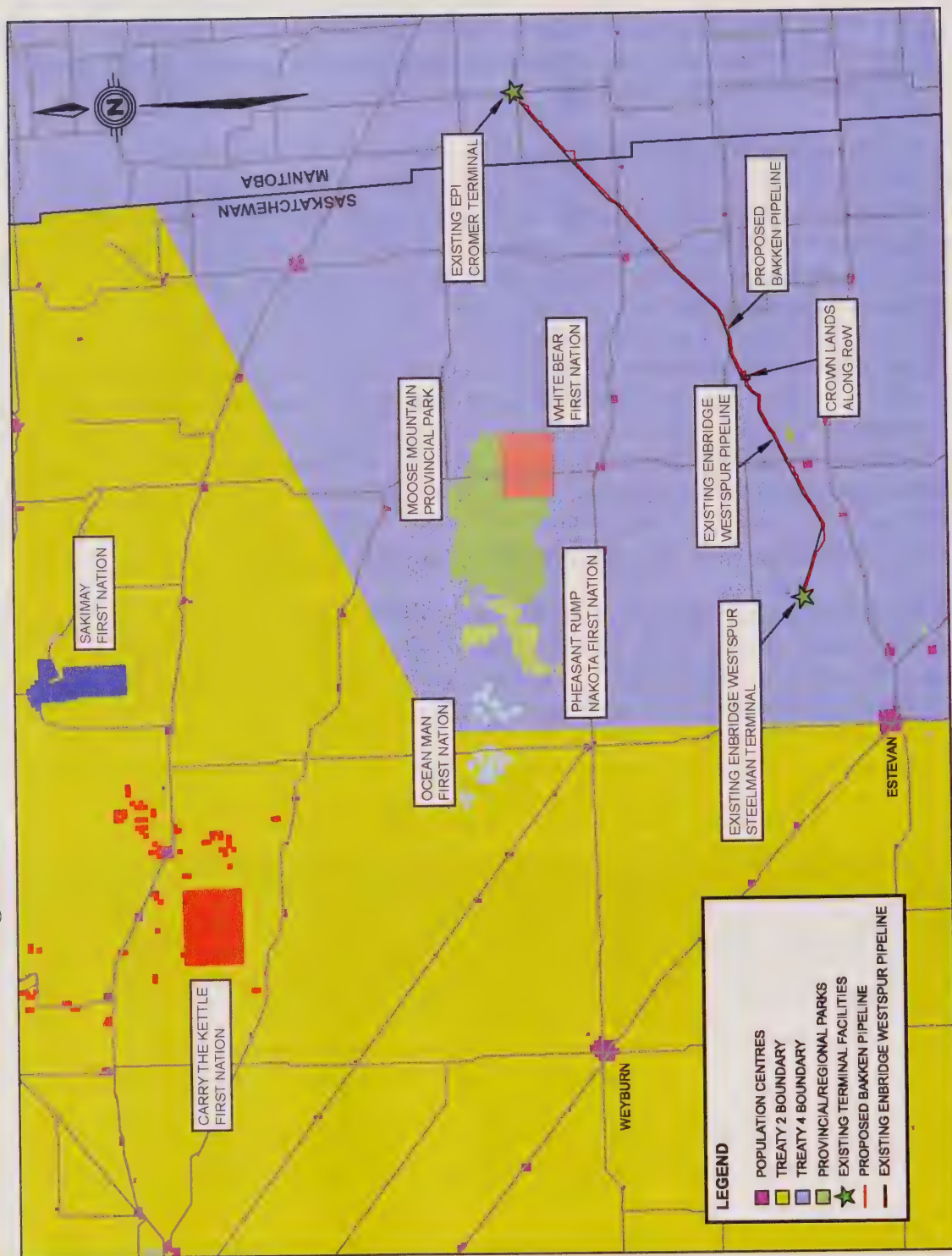
## 8.2 Participation of Aboriginal Groups in the Regulatory Process

Eight Aboriginal groups participated as Intervenor in the OH-01-2011 proceeding, including six Aboriginal communities and two Aboriginal organizations. The Aboriginal Intervenor and the extent of their participation are outlined in Table 8-1. The locations of Aboriginal Intervenor within approximately 150 km of the Project are shown in Figure 8-1.

**Table 8-1**  
**Aboriginal Intervenor in the OH-01-2011 Proceeding**

<b>Intervenor</b>	<b>Granted Intervenor Status</b>	<b>Filed Written Evidence</b>	<b>Provided Oral Evidence</b>	<b>Withdrew from Hearing Process</b>	<b>Presented Witnesses</b>	<b>Final Argument</b>
<b>Communities</b>						
CTKFN	✓	✓				✓
OMFN	✓	✓		✓		
PRNFN	✓					
Red Pheasant First Nation (RPFN)	✓			✓		
SFN	✓	✓		✓		
WBFN	✓		✓		✓	✓
<b>Organizations</b>						
FSIN	✓					
TFCC	✓	✓	✓		✓	✓

**Figure 8-1**  
**Aboriginal Intervenor in the OH-01-2011 Proceeding**



Source: Modified from Map 1 (Filing ID: A2C9J5) attached to Enbridge Bakken's response to NEB information request # 3.6

### **8.3 Aboriginal Engagement by Enbridge Bakken**

In its Project application and subsequent filings, Enbridge Bakken provided a detailed summary of consultation activities that it undertook with Aboriginal groups.

Enbridge Bakken used the following criteria to determine which Aboriginal communities to engage with:

- the proximity of Aboriginal communities to the Project area (Enbridge Bakken engaged First Nation communities whose reserve lands are within approximately 50 km of the Project and Métis communities within the region traversed by the Project);
- Enbridge Bakken's knowledge of the Aboriginal communities in the area based on EPI's 50-plus-year history of operating pipelines and facilities in southeastern SK; and
- guidance from provincial and federal government agencies.

Enbridge Bakken also stated that it would engage with any Aboriginal community that had not previously identified itself as being potentially impacted by the Project. Enbridge Bakken initially engaged in Project discussions beginning in September 2010 with the following Aboriginal groups:

- WBFN;
- BSFN;
- Sioux Valley Dakota First Nation;
- Canupawakpa Dakota First Nation;
- Métis Nation – Saskatchewan, Eastern Region III; and
- Manitoba Métis Federation – Southwest Region.

The MPMO identified an additional 22 potentially-affected Aboriginal groups. Of these, eight groups registered as Intervenor in April 2011 and are listed in Table 8-1. After Intervenor applications were filed, Enbridge Bakken undertook consultation with CTKFN, OMFN, PRNFN, RPFN, SFN, TFCC and FSIN.

Enbridge Bakken used a number of communication approaches for its Aboriginal engagement program including mail-outs, telephone calls and face-to-face meetings. Consultation has been ongoing with CTKFN, OMFN, PRNFN, SFN, WBFN, TFCC and FSIN since 8 April 2011 in various capacities such as e-mail, telephone calls as well as face-to-face meetings.

Enbridge Bakken sent letters to all Intervenor groups requesting that each group indicate in writing any site- or Project-specific concerns that they may have. CTKFN and TFCC provided written evidence and WBFN provided oral evidence of its concerns to Enbridge Bakken and the Board.



## *Views of the Parties*

### **Carry the Kettle First Nation**

CTKFN stated that it has participated in Enbridge Bakken's engagement program, but have not been meaningfully consulted about potential Project impacts on its rights and interests.

### **White Bear First Nation**

WBFN stated that it has participated in Enbridge Bakken's engagement program and had a face-to-face meeting with Enbridge Bakken on 8 and 9 November 2010. However, WBFN stated that Enbridge Bakken's consultation has not been adequate and meaningful. WBFN submitted a letter to the Board indicating that it did have concerns about the Project, and also submitted oral evidence and an oral final argument, which is described in Subsection 8.4.

During the oral portion of the Hearing, WBFN stated that, although Enbridge Bakken's consultation has been inadequate, it is open to ongoing dialogue with the company throughout the Project lifecycle.

### **Ocean Man First Nation, Red Pheasant First Nation and Sakimay First Nation**

Prior to the start of the oral portion of the hearing, Enbridge Bakken reached agreements with OMFN, RPFN and SFN, which resulted in Enbridge Bakken receiving letters of support for the Project from those First Nations. OMFN, RPFN, SFN requested that their evidence be withdrawn from the record of proceeding.

### **Treaty Four Council of Chiefs**

Yorkton Tribal Council applied for Intervenor status on behalf of TFCC. TFCC stated its members' Aboriginal rights and interests were not even raised, much less addressed, in the Project application. TFCC took the position that Treaty 4 members have not been meaningfully engaged and consulted on the potential adverse impacts of the Project.

TFCC submitted that Enbridge Bakken's information gathering and consultation activities were inadequate and requested information about the Crown's procedural and consultation requirements.

## *Views of Enbridge Bakken*

Enbridge Bakken maintains that its Aboriginal and Native American Policy, in conjunction with its Project-specific consultation program, are sufficient in depth and content given the nature and the location of the Project. In designing and developing its Aboriginal consultation program, Enbridge Bakken reviewed EPI's 50-plus-year operating history in southeastern SK and directly adjacent to the proposed Bakken Pipeline corridor. During this time, EPI was not made aware of any current use of the lands for the purposes of exercising traditional rights or activities.

Enbridge Bakken summarized the key issues raised by Aboriginal groups during the course of its consultation as:

- cumulative environmental and socio-economic impacts on traditional land and resource use;
- impacts on archaeological and sacred sites;
- availability of business and employment opportunities;
- future impacts of pipeline ruptures, either man-made or natural; and
- consideration for impact benefit agreements.

To address concerns regarding business and employment opportunities, Enbridge Bakken has committed to, wherever possible, offering opportunities to Aboriginal businesses and employers in close proximity to the Project. It further stated that it would continue its consultation efforts during the regulatory process and throughout the lifecycle of the Project.

Enbridge Bakken stated in its 28 September 2011 letter that it has diligently attempted to meet with CTKFN to understand its interests and concerns with the Project, but, despite Enbridge Bakken's best efforts, CTKFN has been unresponsive to numerous requests for meetings. Enbridge Bakken remains open to further understanding how CTKFN believes the Project would impact its exercise of traditional use rights as well as possible mitigation measures for any Project impacts that may be identified by CTKFN.

In the event that impacts on traditional land and resource uses are identified, Enbridge Bakken has committed to working with Aboriginal groups to determine appropriate mitigation measures.

## **8.4 Impacts of the Project on Aboriginal Groups**

### ***Views of the Parties***

#### **Pheasant Rump Nakota First Nation**

PRNFN expressed concern that the Project would have environmental impacts and would infringe on hunting rights.

#### **Carry the Kettle First Nation**

In its affidavits, CTKFN expressed concerns regarding impacts on traditional land use (TLU) activities and Aboriginal rights such as hunting. In its written argument, CTKFN also expressed concerns about impacts on traditional land use activities and Aboriginal rights such as fishing, trapping, plant gathering as well as hunting. CTKFN requested supplementary information from Enbridge Bakken on how it made its determination of impact without a TLU study; which hunters, trappers and gatherers Enbridge Bakken spoke with regarding impacts on traditional activities within the Project area; and the mitigation measures that Enbridge Bakken plans to implement to assure that there would be no impacts on treaty rights.

On 8 September 2011, CTKFN notified the Province of SK of its interest to purchase three parcels of land located within the Project RoW for Treaty Land Entitlement (TLE) purposes. CTKFN stated that any Board approval of the Project may frustrate CTKFN's ability to obtain TLE lands and that this may prevent CTKFN from reconciling historic and longstanding reserve land shortfalls.

### **White Bear First Nation**

WBFN expressed concerns about the potential adverse cumulative effects of the Project on the environment and the negative impacts of the Project on its ability to practice traditional rights such as hunting, fishing and gathering of medicinal and traditional plants. WBFN also expressed concerns about the discovery of previously-unidentified heritage, cultural and spiritual items (such as arrowheads, pipes, tools, human remains and burial sites) during construction and throughout the life of the Project. WBFN expressed further concerns about natural or man-made disasters that may result in a spill.

WBFN stated that it is interested in employment opportunities with Enbridge Bakken through its oil and gas business, Wabimusqua Oil & Gas Limited. WBFN confirmed that it has band members that have trade certifications and the ability to work in the oil and gas sector.

WBFN indicated that, if its outstanding TLE claim is resolved, it intends to buy land as close to its reserve as it can, likely to the south and east. In summarizing its position, WBFN stated that it does not have major concerns about the Project compared to other issues it is dealing with within its reserve, but that it still has concerns. It also submitted that the Board should require that approval be conditional on Enbridge Bakken entering into an impact benefit agreement.

WBFN did not respond to the Board's information request seeking additional information about particular traditional activities currently being carried out by its members within or near Project lands, including hunting, trapping, fishing and general descriptions of known locations; a description of the collection of medicinal and food plants; and a description of any cultural sites used or known. WBFN; however, did provide some information at the oral hearing.

### **Federation of Saskatchewan Indian Nations**

FSIN was interested in participating as an Intervenor because the Project is located in the traditional territory of its members.

FSIN responded to the Board's information request seeking additional information about particular traditional activities currently being carried out by its members within or near the Project lands including hunting, trapping, fishing and general descriptions of known locations; a description of the collection of medicinal and food plants; and a description of any cultural sites used or known. FSIN stated that they do not have this information and has not received sufficient funding to enable the collection of such information. FSIN agreed with TFCC that there is a need for baseline information studies, such as a Traditional Resource Use Plan and Traditional Use Study, to demonstrate how the Project may or would potentially impact its members. FSIN also expressed concerns about the protection of known and unknown historical and sacred sites.



## **Treaty Four Council of Chiefs**

According to TFCC, the Project would infringe on its members rights to hunt, trap, fish and gather medicinal and traditional plants for sustenance, commercial, social and ceremonial purposes. In its 25 August 2011 and 15 November 2011 letters, TFCC filed a preliminary list of stated specific direct adverse impacts of the Project on its members' treaty and Aboriginal rights, including potential effects of future spills, damage and malfunctions; construction and traffic; impacts on archeological and sacred sites; habitat fragmentation, wetlands, watercourse crossings, wildlife and wildlife habitat; and cumulative environmental effects. TFCC stated that a TLU study is required in order to identify Project-specific impacts and for Enbridge Bakken to fulfill its regulatory requirements.

TFCC stated that 13 of its 34 members are potentially affected by the Project. TFCC further stated that these 13 groups are already impacted by pipeline projects in the area and are very concerned about the cumulative impacts of future projects within its traditional territory.

TFCC indicated that, even though the Project mainly runs through private land, it does not mean that treaty and Aboriginal rights cannot be and are not being exercised in this area. TFCC disagreed with Enbridge Bakken's assertion that the Project's location on private lands means no rights are infringed upon and no impacts would occur. It stated that private tenure of the land does not preclude Treaty Four rights on the lands around the Project.

TFCC responded to the Board's information request seeking additional information about particular traditional activities currently being carried out by its members within or near the Project lands including hunting, trapping, fishing and general descriptions of known locations; a description of the collection of medicinal and food plants; and a description of any cultural sites used or known. TFCC stated that it does not currently have this information. It has taken steps to look into funding a study, but does not have the capacity to fund these studies on its own.

### ***Views of Enbridge Bakken***

Enbridge Bakken submitted that the Project would have minimal impact on Aboriginal groups along the Project RoW because it follows existing RoW and, where it does not, it follows pre-existing linear disturbances on land used for primarily for agricultural or ranching purposes. Enbridge Bakken further submitted that, because the land is cultivated farmland, it is visibly incompatible with the exercise of traditional activities.

Enbridge Bakken noted that the Project traverses lands covered by Treaty 2 and that the majority of the Project would follow the existing Enbridge Westspur RoW. Enbridge Bakken anticipates that Project impacts on traditional land and resource use, if any, would be minimal due to current land tenure and land use. Enbridge Bakken provided affidavit evidence indicating that landowners are not aware of any past or current TLU activities taking place on privately-held land or Crown land traversed by the Project.

Enbridge Bakken stated that the results from its Environmental and Socio-Economic Assessment indicate that the Project would not cause significant cumulative adverse effects on Aboriginal and treaty rights and socio-economic elements. Enbridge Bakken also stated that 98.5% of the Bakken Pipeline would traverse privately-held lands. The remaining 1.5% would cross Crown

land which is currently occupied and access to this land for the purpose of traditional activities would be restricted. Enbridge Bakken committed to implementing a Heritage Resources Discovery Contingency Plan, which would address concerns raised by Aboriginal Intervenor regarding the disturbance of any previously-unidentified heritage, cultural or spiritual items found during construction.

Enbridge Bakken stated that it declined requests from TFCC to fund a TLU study or other studies because TFCC has not provided any information about potential Project-specific impacts. Enbridge Bakken further stated that TFCC has focused on the potential environmental and socio-economic effects of the Project without regard for the associated mitigation measures outlined in its Environmental and Socio-economic Assessment that would prevent or eliminate those potential effects. Enbridge Bakken noted that TFCC made similar funding requests of the federal Crown which were also declined.

Enbridge Bakken indicated that TFCC has had the opportunity to fully participate in the NEB's proceeding and to share its views directly with the Board. Enbridge Bakken noted that TFCC's Tribal Chief acknowledged that TFCC has participated fully despite diminished capacity funding.

Enbridge Bakken stated that it has consulted with WBFN on numerous occasions since October 2010 and has frequently discussed economic opportunities. Enbridge Bakken is awaiting a list of businesses and individuals interested in providing services for the Project.

Enbridge Bakken engaged with CTKFN on many occasions to understand its interests and concerns with the Project, but that CTKFN has been unresponsive to its request for a meeting. Enbridge Bakken stated that CTKFN's affidavit evidence clearly established that it does not practice traditional activities within the Project RoW. Furthermore, Enbridge Bakken noted that CTKFN's evidence was not adopted during the oral portion of the hearing or tested through cross-examination.

Enbridge Bakken was unaware of CTKFN's TLE submission until CTKFN informed the Board that it had requested to purchase three parcels of land proposed to be crossed by the Bakken Pipeline.

Enbridge Bakken submitted that it has meaningfully engaged Aboriginal communities potentially impacted by the Project, or has provided a reasonable opportunity for potentially-affected communities to discuss their concerns.

### ***Views of the Board***

Although certain Aboriginal groups were not identified in Enbridge Bakken's first round of consultation, the Board finds that Enbridge Bakken has made sufficient efforts to consult with all potentially-impacted groups, and to address concerns, once raised. The Board is of the view that Enbridge Bakken's Aboriginal engagement program for the Project was adequate for identifying potential impacts of the Project on participating



Aboriginal groups, as well as in developing appropriate mitigation measures, based on the scope of the Project.

The Board is satisfied that potentially-affected Aboriginal groups were provided with adequate information about the Project and that these groups had sufficient opportunity to make their views known to Enbridge Bakken and the Board. Participant funding was granted through the NEB's PFP to eight Aboriginal groups in order to facilitate participation.

The Board acknowledges OMFN, RPFN, SFN and Enbridge Bakken for their efforts in resolving concerns and issues relating to the proposed Project. The Board grants the request of OMFN, RPFN and SFN to have their evidence withdrawn from the record of proceeding.

The Board finds that Aboriginal Intervenor had an adequate opportunity to participate in the Board's process. TFCC made numerous filings throughout the hearing process and all parties had the opportunity to cross examine Enbridge Bakken's witnesses and provide its own witness panels if they wished. The Board notes that it accommodated late requests from TFCC and WBFN to file written or oral evidence. The rules were modified to allow TFCC to reply verbally to submissions during oral argument despite an initial choice being made to provide written rather than oral argument. The Board also granted WBFN's request to provide oral argument at the end of the opening day of the hearing. The Board benefitted and appreciated hearing directly from the Chief for WBFN and the Tribal Chief for TFCC at the oral hearing. Although CTKFN participated in the hearing process, its evidence was not adopted or tested through cross-examination during the oral portion of the hearing.

The Board notes that 98.5% of the Bakken Pipeline would be on privately-held lands currently used for agriculture and ranching. The remaining 1.5% would be on occupied Crown land. Notwithstanding TFCC's position that treaty rights can be exercised on private farm and grazing lands, the Board finds that TFCC has not provided any evidence about exercising such rights within the Project RoW. The Board is of the view that no party filed specific evidence to show that the land along the RoW is being used for traditional purposes or that it is likely to be used for such purposes in the foreseeable future. Therefore, the Board declines the requests by TFCC, WBFN, CTKFN and FSIN for Enbridge Bakken to be required to fund a TLU study and other studies.

The Board also declines to require an impact benefit agreement as requested by WBFN. WBFN did not cite any legal authority that would enable the Board to grant its request. The Board notes; however, that Enbridge Bakken did commit to require its contractors to implement an Aboriginal participation plan and to discuss economic opportunities with local Aboriginal groups.



The Board is not persuaded by CTKFN's argument that any Board approval of the Project may frustrate CTKFN's ability to make its selected TLE lands reserve lands. The TLE process requires the consent of the SK Crown and the consent of occupants of the land. The Board notes that the SK Crown has already granted Enbridge Bakken the necessary land rights for the Bakken Pipeline. There is no firm evidence that the lands on which the Bakken Pipeline would be located will be granted as part of a future TLE settlement. Assertions by the CTKFN that it is interested in these lands are not sufficient proof that the lands are likely to be part of a TLE settlement. Further, the fact that the lands are currently privately-occupied makes the interest even more speculative.

Although there were general claims of traditional use in the Project vicinity, there was no specific evidence provided by Aboriginal groups about traditional land and resource use within the Project RoW. TFCC has compiled what it refers to as a preliminary list of specific direct adverse impacts of the Project on its members' treaty and Aboriginal rights. The Board is not persuaded that TFCC's submission has merit because it fails to consider how Enbridge Bakken's proposed mitigation measures, when implemented, would avoid or reduce any potential effects.

Even assuming there are any impacts on traditional land and resource use, the Board is of the view that such impacts would be minimal. This is because the Project would involve a relatively brief period of construction, with the vast majority of the facilities being buried. Furthermore, potential impacts on traditional use, if any, can be effectively mitigated through Enbridge Bakken's implementation of its standard mitigation measures and the Board's conditions of approval.

With regard to concerns expressed about how the Project could impact undiscovered historical, archaeological, cultural and spiritual sites, the Board notes Enbridge Bakken's commitment to cease construction and contact the appropriate government department in the event that any heritage resources are encountered during construction. The Board expects Enbridge Bakken to implement its Heritage Resources Discovery Contingency Plan.

The Board expects Enbridge Bakken to continue its consultation activities with Aboriginal groups. The Board directs Enbridge Bakken to file with the Board an update on its consultation activities with Aboriginal groups during construction (in Appendix II, see Condition 12 of Order XO-E256-007-2011 and, in Appendix III, Certificate Condition 18).

## Chapter 9

# Environmental and Socio-Economic Matters

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The Board considers environmental and socio-economic matters under both the CEA Act and the NEB Act. The Board expects applicants to identify the effects projects may have on bio-physical and socio-economic elements, the mitigation to reduce those effects and the significance of any residual effects once mitigation has been applied.

This chapter summarizes the EA process used by the NEB for the Project. It also addresses those socio-economic issues not considered under the CEA Act.

### 9.1 Environmental Screening Process

The Project would require a Certificate under section 52 of the NEB Act and an Order under section 58 of the NEB Act and, thus, triggers the requirement for an EA under the CEA Act. Since the Project would not require more than 75 km of new RoW, as defined in the CEA Act *Comprehensive Study List Regulations*, the Project is subject to a screening level of assessment under the CEA Act. The scope of the EA also considers the various other activities that, on their own, would not have triggered an EA under the CEA Act (e.g., Line EX-02 segment deactivation).

Pursuant to the CEA Act *Regulations Respecting the Coordination by Federal Authorities of Environmental Assessment Procedures and Requirements*, the NEB coordinated Responsible Authority and Federal Authority involvement in the CEA Act EA that was conducted within the NEB hearing process.

Following the oral portion of the hearing, the Board issued a draft ESR on 1 November 2011 for a two-week public comment period. The Board received comments from Environment Canada, Transport Canada, TFCC, Manitoba Infrastructure and Transportation, Manitoba Department of Water Stewardship and reply comments from Enbridge Bakken.

The final ESR reflects parties' comments and the Board's assessment of the bio-physical and socio-economic effects of the Project and the proposed mitigation measures, based on the description of the Project, the factors to be considered, and the scope of those factors. The ESR also includes recommendations for conditions to be included in any Board regulatory approvals.

#### *Views of the Board*

With respect to its regulatory decision under the NEB Act, the Board has considered the CEA Act ESR and the Proposed Conditions included therein.

The Board determined in the ESR that, with the implementation of Enbridge Bakken's environmental protection procedures and mitigation

measures, compliance with the Board's regulatory requirements and the NEB's Proposed Conditions, the Project is not likely to cause significant adverse environmental effects. The Board adopts the Proposed Conditions contained in the ESR into conditions of approval.

For details regarding the Board's assessment of the environmental and socio-economic effects evaluated pursuant to the CEA Act, see the attached ESR (Appendix IV).

## **9.2 Socio-Economic Matters**

The Board expects applicants to identify and consider the impacts a project may have on socio-economic conditions including the mitigation of negative impacts and the enhancement of project benefits.

As mentioned above, potential socio-economic effects covered by the CEA Act are included in the ESR. The CEA Act considers indirect socio-economic effects caused by a change to the environment as a result of the Project. Direct socio-economic effects that may result from the Project are assessed under the NEB Act and are discussed in the following subsections.

### **9.2.1 Employment and Economy**

#### ***Views of Enbridge Bakken***

Enbridge Bakken stated that the Project would result in positive impacts on employment and the economy through construction contracting opportunities to qualified local businesses and the employment of local workers whenever possible. The Project is also expected to have positive indirect business and employment opportunities for nearby accommodations, stores and restaurants.

Enbridge Bakken indicated that the Project would result in expenditures of \$151 million on goods and services within Canada, \$12 million in annual tax revenues for the federal government and \$10 million for provincial governments. It would also generate \$335,000 and \$50,000 in annual property taxes in SK and MB, respectively, during operations.

### **9.2.2 Infrastructure and Services**

#### ***Views of Enbridge Bakken***

Enbridge Bakken recognizes that the increase in the number of local workers would increase traffic and competition for recreational and business services. It has mitigated these concerns by considering camp options for the construction work force, transporting waste to appropriate landfill sites and possibly bussing workers to and from the worksite(s). Enbridge Bakken has committed to file with the Board its Construction Traffic Management Strategy in its Environmental Protection Plan prior to the start of construction. Enbridge Bakken noted that there have been no comments or concerns from potentially-affected communities regarding these potential impacts.



### **9.2.3 Accommodations and Emergency Services**

#### ***Views of Enbridge Bakken***

Enbridge Bakken anticipates that the total workforce required to construct the Project is between 325 and 540 individuals. Enbridge Bakken noted that there would be a shortfall of available accommodations in the local area; however, it is anticipated that local accommodations, including hotels, motels, recreational vehicle parks and campgrounds, would house the required personnel in outlying communities such as Estevan, Redvers, Oxbow and Virden. Enbridge Bakken has committed to file with the Board its Worker Accommodation Plan at least 30 days prior to the start of construction. Enbridge Bakken has consulted with emergency services providers in various RMs and no concerns have been raised.

#### ***Views of the Parties***

The RMs of Antler, Browning, Coalfields and Pipestone stated that their communities would directly benefit through reduced tanker-truck traffic impacts on local roads and bridges, increased road safety throughout the area, extended life of road surfaces and decreased costs associated with highway maintenance.

#### ***Views of the Board***

The Board is satisfied that the Project would provide positive employment and economic benefits through construction contracting opportunities to qualified local businesses and the employment of local workers whenever possible. The Project is also expected to have positive indirect business and employment opportunities for nearby accommodations, stores and restaurants.

The Board notes that, specifically for this Project, Enbridge Bakken has earmarked over \$26,000 to be made available for community initiatives and that it is committed to supporting Aboriginal-specific community investment initiatives and engaging interested Aboriginal businesses in the construction of the Project.

The Board also notes Enbridge Bakken's commitment to file a Worker Accommodation Plan and a Construction Traffic Management Strategy in its Environmental Protection Plan, which would be submitted to the Board for approval prior to the start of construction (in Appendix II, see Condition 5 of Order XO-E256-007-2011 and, in Appendix III, Certificate Condition 5).

The Board further notes that the Project would provide for an efficient transportation alternative for crude oil and would reduce overall tanker-truck traffic on municipal and provincial roads. The Board finds that the need for the Project is also supported by several local municipalities and that the Project would result in benefits to those communities in the form of reduced tanker-truck traffic impacts on local infrastructure, increased road safety, decreased maintenance costs and enhanced potential employment opportunities.

## Chapter 10

# Application for the Section 58 Facilities

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In its application for the Project, Enbridge Bakken requested that the Board grant an exemption Order, pursuant to section 58 of the NEB Act, authorizing the construction and operation of the Bakken Pump Station and facilities within the confines of EPI's existing Cromer Terminal (collectively, the Section 58 Facilities). Specifically, Enbridge Bakken sought exemption for these facilities from the provisions of paragraphs 30(1)(b), 31(c) and 31(d), and sections 33 and 47 of the NEB Act.

### *Views of Enbridge Bakken*

Enbridge Bakken submitted that the sites for the Bakken Pump Station and facilities at Cromer were selected primarily due to their proximity to the existing Enbridge Westspur Steelman Terminal and EPI Cromer Terminal. Enbridge Bakken noted that infrastructure proposed as part of the Section 58 Facilities would be constructed on lands owned by Enbridge Bakken and EPI. During the oral portion of the hearing, Enbridge Bakken confirmed that there are no outstanding concerns from any landowners living in close proximity to the applied-for facilities.

### *Views of the Board*

Pursuant to the CEA Act, the Board conducted an environmental screening of the Project, including the Section 58 Facilities, and concluded that, with the implementation of Enbridge Bakken's proposed environmental protection procedures and mitigation measures and the NEB's proposed conditions, the construction and operation of the Section 58 Facilities are not likely to cause significant adverse environmental effects.

The Board notes Enbridge Bakken's submission that the Section 58 Facilities would be located entirely on lands privately-held by Enbridge Bakken and EPI, and the lack of outstanding concerns from anyone whose lands may be adversely affected by the location of the Section 58 Facilities.

The Board is of the view that it is in the public interest to grant Enbridge Bakken's request for an exemption Order for the Section 58 Facilities, should a Certificate be issued for the Project. The Board grants Enbridge Bakken exemption from paragraphs 31(c) and 31(d), and section 33 of the NEB Act, subject to the conditions contained in Order XO-E256-007-2011 (included in Appendix II). As a result, Enbridge Bakken is not required to file a plan, profile and book of reference for the Section 58 Facilities.

The Board does not grant Enbridge Bakken exemption from the provisions of paragraph 30(1)(b) and section 47 of the NEB Act and advises that Enbridge Bakken will have to apply for leave to open the Section 58 Facilities.

## Chapter 11

### Application for the Transfer of Line EX-02

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As part of the Project, Enbridge Bakken and Enbridge Westspur jointly made an application, pursuant to paragraphs 74(1)(a) and 74(1)(b) of the NEB Act, requesting leave for Enbridge Westspur to sell and for Enbridge Bakken to purchase existing Line EX-02. The construction and operation of Line EX-02 was authorized by the Board on 11 January 1996 by way of Order XO-W2-2-96.

In its Project application, Enbridge Bakken also requested an Order, issued under section 21 of the NEB Act, which would amend Order XO-W2-2-96 to reflect the transfer of Line EX-02.

#### *Views of Enbridge Bakken*

Enbridge Bakken indicated that Enbridge Westspur has agreed to sell Line EX-02 and its associated assets to Enbridge Bakken pursuant to a transfer agreement which would be finalized between the parties prior to the Project's in-service date. Line EX-02 assets include:

- the Line EX-02 pipeline itself;
- associated pipeline facilities at Steelman Terminal, including a custody transfer meter, interconnecting piping and tie-ins;
- a check valve and two automated block valves at the Souris River; and
- the necessary land rights associated with the Line EX-02 RoW and valve sites.

Enbridge Bakken noted that the expected closing date for the transaction would be no later than the in-service date for the Project.

Enbridge Bakken indicated that it has notified stakeholders of the proposed transfer of ownership as part of its public consultation and Aboriginal engagement programs for the Project and that no specific concerns have been expressed with respect to that aspect of the Project.

#### *Views of the Parties*

##### **Treaty Four Council of Chiefs**

TFCC submitted that there has been no consideration as to how the requested section 74 approvals may impact the activities of traditional resource users.



### *Views of the Board*

After considering the evidence provided by Enbridge Bakken, the Board finds the justification provided by Enbridge Bakken for the acquisition of Line EX-02 to be reasonable. The Board notes that, while TFCC raised a general concern about the transfer, it did not provide any evidence or explanation of how Enbridge Bakken's acquisition of Line EX-02 would have any specific impact on any Aboriginal community.

Accordingly, the Board finds that leave pursuant to paragraphs 74(1)(a) and 74(1)(b) of the NEB Act for Enbridge Westspur to sell and for Enbridge Bakken to purchase Line EX-02 is in the public interest. The Board grants these two parties leave to complete the transaction and has issued Order MO-26-2011 to that effect (see Appendix II).

With respect to Enbridge Bakken's request under section 21 of the NEB Act for an Order to amend Order XO-W2-2-96 to reflect the transfer of ownership, the Board advises Enbridge Bakken to notify the Board when the transaction is completed. At that time, the Board will take the appropriate steps to amend Order XO-W2-2-96.

## Chapter 12

# Application to Deactivate a Segment of Line EX-02

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As part of its application for the Project, Enbridge Bakken requested authorization, pursuant to section 44 of the OPR-99, to deactivate a 354.6 m long segment of the existing 33.7 km long Line EX-02, which is currently owned by Enbridge Westspur.

The transfer (sale and purchase) of Line EX-02, in its entirety, from Enbridge Westspur to Enbridge Bakken is discussed in Chapter 11 of these Reasons.

Enbridge Westspur was granted approval to construct and operate Line EX-02 in 1996. On 7 April 2006, the Board approved the deactivation of this line through the issuance of Order MO-01-2006. Following this, on 29 November 2010, the Board granted approval for Enbridge Westspur to reactivate and reverse the flow of Line EX-02 by way of Board Order XO-E103-06-2010.

### *Views of Enbridge Bakken*

Through its proposal under section 52 of the NEB Act, Enbridge Bakken plans to extend Line EX-02 through the construction of the Bakken Pipeline from the proposed Bakken Pump Station to EPI's existing Cromer Terminal near Cromer, MB. As a result, once the Project is operational, there will be no immediate need to utilize the section of Line EX-02 located between the Bakken Pump Station and Steelman Terminal.

Enbridge Bakken proposed to maintain this segment in a deactivated state as it may be required for future use.

Enbridge Bakken has committed to adhere to the latest NEB regulatory requirements in its design of the Project, as a whole. It has submitted that the primary applicable regulations are the OPR-99, which incorporates, by reference, CSA Z662.

### *Views of the Board*

The Board is of the view that, as a result of the proposed configuration of existing and proposed infrastructure and facilities, the Project would not require the use of that segment of Line EX-02 located between Steelman Terminal and the Bakken Pump Station.

The Board notes Enbridge Bakken's commitments to meet the relevant regulatory requirements and to implement current standards. The Board also notes Enbridge Bakken's commitment to conduct Project activities in accordance with company manuals (e.g., EPI's *Environmental Guidelines for Construction*, December 2003).

The Board included the proposed deactivation within the scope of its CEA Act ESR, which concluded that the Project, as a whole, is not likely to result in significant adverse environmental effects.

The Board notes that no concerns have been identified which are specific to the deactivation activities.

Considering the above, the Board is satisfied with the information filed and considers it to be in the public interest to grant the requested authorization under section 44 of the OPR-99 (see Appendix II for Board Order MO-25-2011). The Board notes, and has referenced in the Order, that the conduct of the deactivation activities is subject to the completion of the transfer of Line EX-02 from Enbridge Westspur to Enbridge Bakken.

The Board notes the future possibility that the deactivated segment of Line EX-02 may be reactivated and, as such, requires Enbridge Bakken to maintain it in a protected state in order to preserve the integrity of the line and the environment along that portion of RoW. Any plans to reactivate this segment would require an application to the Board under section 45 of the OPR-99.



## Chapter 13

# Conclusion on Public Interest and Public Convenience and Necessity

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The Board has considered the evidence and submissions made by all participants in the OH-01-2011 proceeding. The Board's views and conclusions on individual matters which fall within the scope of the various requested authorizations are contained in the preceding chapters.

Based on all of the evidence presented, the Board is satisfied that the Project is and will be required by the present and future convenience and necessity and therefore, finds that approval of the Project is in the public interest.

## Appendix I

### List of Issues

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The Board has identified but does not limit itself to the following issues for discussion in the OH-01-2011 proceeding:

1. The need for the proposed facilities.
2. The economic feasibility of the proposed facilities.
3. The potential commercial impacts of the proposed project.
4. The potential environmental and socio-economic effects of the proposed facilities, including those to be considered under the Canadian Environmental Assessment Act (the Scope of which is set out in Appendix V of the Hearing Order).
5. Potential impacts of the project on Aboriginal interests, including Aboriginal and treaty rights.
6. Consultation with the public and Aboriginal groups on the project.
7. Potential impacts of the project on landowners and land use.
8. The appropriateness of the general route and land requirements for the pipeline.
9. The suitability of the design of the proposed facilities.
10. The method of toll and tariff regulation.
11. The terms and conditions to be included in any approval the Board may issue.

## Appendix II

# NEB Orders including Schedule A

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### *Section 58 Facilities*

#### **ORDER XO-E256-007-2011**

**IN THE MATTER OF** the *National Energy Board Act* (the NEB Act) and the regulations made thereunder; and

**IN THE MATTER OF** an application pursuant to section 58 of the NEB Act, dated 17 January 2011, made by Enbridge Bakken Pipeline Company Inc. (Enbridge Bakken) on behalf of Enbridge Bakken Pipeline Limited Partnership for exemptions from the provisions of paragraphs 30(1)(b), 31(c) and 31(d) and sections 33 and 47 of the NEB Act in respect of the proposed Bakken Pump Station and facilities at the existing Enbridge Pipelines Inc. (EPI) Cromer Terminal (the Section 58 Facilities), filed with the National Energy Board (NEB or Board) under File OF-Fac-Oil-E256-2010-01 02.

**BEFORE** the Board on 5 December 2011.

**WHEREAS**, as part of Enbridge Bakken's 17 January 2011 application for the Bakken Pipeline Project Canada (the Project), it requested an Order, pursuant to section 58 of the NEB Act, exempting the Section 58 Facilities from the provisions of paragraphs 30(1)(b), 31(c) and 31(d) and sections 33 and 47 of the NEB Act;

**AND WHEREAS** the Section 58 Facilities, as fully described in the attached Schedule A, include the Bakken Pump Station near Steelman, Saskatchewan, and facilities which are to be located within the confines of EPI's existing Cromer Terminal near Cromer, Manitoba;

**AND WHEREAS** the Board held a public hearing in respect of the Project, pursuant to Hearing Order OH-01-2011;

**AND WHEREAS**, pursuant to the *Canadian Environmental Assessment Act*, the Board conducted an environmental screening of the Project, including the Section 58 Facilities, and concluded that, with the implementation of Enbridge Bakken's proposed environmental protection procedures and mitigation measures, compliance with the Board's regulatory requirements and the NEB's Proposed Conditions, the Project is not likely to cause significant adverse environmental effects;

**AND WHEREAS** the Board has examined the application and related submissions and considers it to be in the public interest to issue an Order authorizing the construction and operation of the Section 58 Facilities;



**IT IS ORDERED THAT**, pursuant to section 58 of the NEB Act, the Section 58 Facilities are exempt from the provisions of paragraphs 31(c) and 31(d) and section 33 of the NEB Act, subject to the conditions contained in this Order.

**IT IS FURTHER ORDERED THAT**, pursuant to subsection 19(1) of the NEB Act, this Order comes into force upon the issuance by the Board, subject to Governor-in-Council approval, a Certificate of Public Convenience and Necessity for the Project.

In these conditions, the expression “commencing construction” means the clearing of vegetation, ground-breaking and other forms of right-of-way preparation that may have an impact on the environment, but does not include activities associated with normal surveying activities.

Where any condition requires a filing with the Board “for approval”, Enbridge Bakken must not commence that action until the approval is issued.

### **General**

#### ***Condition Compliance***

1. Enbridge Bakken must comply with all of the conditions contained in this Order unless the Board otherwise directs.

#### ***Facility Design, Location, Construction, Installation and Operation***

2. Enbridge Bakken must cause the approved Section 58 Facilities to be designed, located, constructed, installed, and operated in accordance with the specifications, standards, commitments made and other information referred to in its application or as otherwise agreed to during questioning or in its related submissions.

#### ***Implementation of Environmental Protection***

3. Enbridge Bakken must implement or cause to be implemented all of the policies, practices, programs, mitigation measures, recommendations, procedures and its commitments for the protection of the environment included in or referred to in its application or as otherwise agreed to during questioning or in its related submissions.

### **Prior to Commencing Construction**

#### ***Commitments Tracking Table***

4. Enbridge Bakken must:
  - a) file with the Board, at least 14 days prior to commencing construction, an updated Commitments Tracking Table;
  - b) update the status of the commitments in a) on a monthly basis until completion of the Section 58 Facilities; and

- c) maintain at its construction office(s):
  - i) the relevant environmental portion of the Commitments Tracking Table listing all regulatory commitments, including but not limited to, those commitments resulting from Enbridge Bakken's application and subsequent filings, and conditions from permits, authorizations and approvals;
  - ii) copies of any permits, approvals or authorizations for the Section 58 Facilities issued by federal, provincial or other permitting authorities, which include environmental conditions or site-specific mitigation or monitoring measures; and
  - iii) any subsequent variances to any permits, approvals or authorizations in ii).

### ***Environmental Protection Plan***

- 5. Enbridge Bakken must file with the Board for approval, at least 45 days prior to commencing construction, an updated Environmental Protection Plan (EPP), including an Environmental Plot Plan, for the Section 58 Facilities. This EPP must be a comprehensive compilation of all environmental protection procedures, mitigation measures, and monitoring commitments, as set out in Enbridge Bakken 's application for the Project, its subsequent filings, evidence collected during the hearing process, or as otherwise agreed to during questioning or in its related submissions during the OH-01-2011 proceeding. The EPP must subsequently be updated to include any additional measures arising from all outstanding pre-construction field studies. Construction cannot begin until the Board approves the final updated EPP.

The EPP must include, but not be limited to, the following elements:

- a) environmental procedures, including site-specific plans, criteria for implementation of these procedures, mitigation measures and monitoring applicable to the Section 58 Facilities and activities;
- b) a wetland reclamation plan which includes a description of the condition to which Enbridge Bakken intends to reclaim and maintain the wetlands once construction has been completed; and
- c) evidence of consultation with appropriate federal and provincial government authorities that indicates their views on the EPP.

### ***Security Management Plan***

- 6. Enbridge Bakken must file with the Board, at least 14 days prior to commencing construction, a Security Management Plan for construction activities pursuant to NEB Proposed Regulatory Change (PRC) 2010-01, Pipeline Security Management Program.

### ***Construction Safety Manual***

7. Enbridge Bakken must file with the Board, at least 14 days prior to commencing construction, a Construction Safety Manual.

### ***Wetland Compensation Plan***

8. Enbridge Bakken must file with the Board, at least 30 days prior to commencing construction, the wetland compensation plan and evidence demonstrating consultation with appropriate federal and provincial government authorities indicating their views on the methodology and results of the plan.

### ***Construction Schedule***

9. Enbridge Bakken must file with the Board, at least 14 days prior to commencing construction, a detailed construction schedule(s) identifying major construction activities and must notify the Board of any modifications to the schedule(s) as such modifications occur.

### **During Clearing or Construction Activities**

#### ***Breeding Bird Surveys***

10. In the event of construction or clearing activities within restricted activity periods for non-migratory birds protected under federal and provincial jurisdiction and for migratory birds, Enbridge Bakken must retain a qualified avian biologist to carry out a pre-construction survey to identify any birds and active nests in areas immediately surrounding the site(s) and must file the following with the Board within 15 days following the commencement of these construction or clearing activities:
  - a) the results of the survey;
  - b) mitigation, including monitoring, developed in consultation with Environment Canada, the Canadian Wildlife Service and the appropriate provincial government authorities to protect any identified migratory and non-migratory birds and their nests;
  - c) mitigation, including monitoring, developed in consultation with Environment Canada and the Canadian Wildlife Service to protect any identified *Species at Risk Act*- (SARA-) listed birds and their nests; and
  - d) evidence to confirm that the appropriate federal and provincial government authorities were consulted on the proposed methodology for the survey, the results of the survey and the mitigation and monitoring to be used, and a description of any outstanding concerns they may have.



### ***Joining Program and Field Pressure Testing Program***

11. Enbridge Bakken must file with the Board the following programs within the time specified:
  - a) field joining program – 14 days prior to joining; and
  - b) field pressure testing program – 14 days prior to pressure test.

### ***Construction Progress Reports***

12. Enbridge Bakken must file construction progress reports with the Board on a monthly basis in a form satisfactory to the Board. The reports must include:
  - a) information on the activities carried out during the reporting period, any environmental, socio-economic, security and safety issues and issues of non-compliance, and the measures undertaken for the resolution of each issue and non-compliance; and
  - b) information on consultation activities undertaken with stakeholders and Aboriginal groups for the Section 58 Facilities during construction, including a summary of any issues or concerns raised and a description of how any concerns or issues were addressed.

### **After the Section 58 Facilities are Completed**

#### ***Condition Compliance by a Company Officer***

13. Within 30 days of the date that the approved Section 58 Facilities is completed, Enbridge Bakken must file with the Board a confirmation, by an officer of the company, that the approved Section 58 Facilities were completed and constructed in compliance with all applicable conditions in this Order. If compliance with any of these conditions cannot be confirmed, the officer of the company must file with the Board details as to why compliance cannot be confirmed. The filing required by this condition must include a statement confirming that the signatory to the filing is an officer of the company.

### **Order Expiration**

#### ***Sunset Clause***

14. Unless the Board otherwise directs prior to 22 December 2012, this Order will expire on 22 December 2012, unless construction in respect of the Section 58 Facilities has commenced by that date.

NATIONAL ENERGY BOARD

L. George  
Acting Secretary of the Board

**SCHEDULE A**  
**Order X0-E256-007-2011**

**Enbridge Bakken Pipeline Company Inc. (Enbridge Bakken)**  
**on behalf of Enbridge Bakken Pipeline Limited Partnership**

**Application dated 17 January 2011**

**Pursuant to Section 58 of the *National Energy Board Act***

**Bakken Pipeline Project Canada – Section 58 Facilities**  
**File OF-Fac-Oil-E256-2010-01 02**

<b>Project Type</b>	New Construction
<b>Location (Saskatchewan)</b>	NE 8-4-5 W2M
<b>Facility Name</b>	Bakken Pump Station
<b>Description</b>	2 x 3500 kW (5000 HP) pump assemblies
<b>Product</b>	Crude Oil

## ***Deactivation of a Segment of Line EX-02***

### **ORDER MO-25-2011**

**IN THE MATTER OF** the *National Energy Board Act* (the NEB Act) and the regulations made thereunder; and

**IN THE MATTER OF** an application pursuant to section 44 of the *Onshore Pipeline Regulations, 1999* (OPR-99), dated 17 January 2011, made by Enbridge Bakken Pipeline Company Inc. (Enbridge Bakken) on behalf of Enbridge Bakken Pipeline Limited Partnership to deactivate a segment of existing Line EX-02 (the Deactivation Activities), filed with the National Energy Board (NEB or Board) under File OF-Fac-Oil-E256-2010-01 02.

**BEFORE** the Board on 5 December 2011.

**WHEREAS**, as part of Enbridge Bakken's 17 January 2011 application for the Bakken Pipeline Project Canada (the Project), it requested authorization, pursuant to section 44 of the OPR-99 to undertake the Deactivation Activities;

**AND WHEREAS** the transfer of Line EX-02 from Enbridge Pipelines (Westspur) Inc. (Enbridge Westspur) to Enbridge Bakken has been authorized by the Board by way of Order MO-26-2011;

**AND WHEREAS** the segment of Line EX-02 to be deactivated is fully described in the attached Schedule A;

**AND WHEREAS** the Board held a public hearing in respect of the Project, pursuant to Hearing Order OH-01-2011;

**AND WHEREAS** the Deactivation Activities do not, on their own, trigger a *Canadian Environmental Assessment Act* (CEA Act) environmental assessment;

**AND WHEREAS**, pursuant to the CEA Act, the Board conducted an environmental screening of the Project, including the Deactivation Activities, and concluded that, with the implementation of Enbridge Bakken's proposed environmental protection procedures and mitigation measures, compliance with the Board's regulatory requirements and the NEB's Proposed Conditions, the Project is not likely to cause significant adverse environmental effects;

**AND WHEREAS** the Board has examined the application and related submissions and considers it to be in the public interest to grant the relief requested;



**IT IS ORDERED THAT**, pursuant to section 44 of the OPR-99, the Deactivation Activities are approved, subject to the completion of the transfer of Line EX-02 from Enbridge Westspur to Enbridge Bakken (MO-26-2011), and to the following conditions:

1. Enbridge Bakken must comply with all of the conditions contained in this Order unless the Board directs otherwise.
2. Enbridge Bakken must cause the segment of Line EX-02 to be deactivated and maintained in accordance with the specifications, standards, commitments made and other information referred to in its application and related submissions.
3. Enbridge Bakken must implement or cause to be implemented all of the policies, practices, programs, mitigation measures, recommendations and procedures and its commitments for the protection of the environment included in or referred to in its application or related submissions.
4. Within 30 days of the date that the approved Deactivation Activities are completed, Enbridge Bakken must file with the Board a confirmation, by an officer of the company, that the approved Deactivation Activities were completed in compliance with all applicable conditions in this Order. If compliance with any of these conditions cannot be confirmed, the officer of the company must file with the Board details as to why compliance cannot be confirmed. The filing required by this condition must include a statement confirming that the signatory to the filing is an officer of the company.

NATIONAL ENERGY BOARD

L. George  
Acting Secretary of the Board

**SCHEDULE A**  
**Order MO-25-2011**

**Enbridge Bakken Pipeline Company Inc. (Enbridge Bakken)**  
**on behalf of Enbridge Bakken Pipeline Limited Partnership**  
**Application dated 17 January 2011**  
**Pursuant to Section 44 of the *Onshore Pipeline Regulations, 1999***

**Bakken Pipeline Project Canada – Deactivation Activities**  
**File OF-Fac-Oil-E256-2010-01 02**

<b>Project Type</b>	Deactivation (segment)
<b>Pipeline</b>	Line EX-02
<b>Location (Saskatchewan)</b>	Between the existing Enbridge Pipelines (Westspur) Inc. Steelman Terminal and Enbridge Bakken's proposed Bakken Pump Station
<b>Approximate Length</b>	354.6 m
<b>Outside Diameter</b>	323.9 mm (NPS 12)
<b>Minimum Wall Thickness</b>	7.14 mm
<b>Pipe Grade</b>	359 MPa
<b>Product Carried</b>	None

***Transfer of Line EX-02***

**ORDER MO-26-2011**

**IN THE MATTER OF** the *National Energy Board Act* (the NEB Act) and the regulations made thereunder; and

**IN THE MATTER OF** an application pursuant to paragraphs 74(1)(a) and 74(1)(b) of the NEB Act, dated 17 January 2011, made jointly by Enbridge Bakken Pipeline Company Inc. (Enbridge Bakken) on behalf of Enbridge Bakken Pipeline Limited Partnership and Enbridge Pipelines (Westspur) Inc. (Enbridge Westspur) for the sale and purchase of Line EX-02, filed with the National Energy Board (NEB or Board) under File OF-Fac-Oil-E256-2010-01 02.

**BEFORE** the Board on 5 December 2011.

**WHEREAS** the Board granted approval for Enbridge Westspur to construct Line EX-02 by way of Order XO-W2-2-96, dated 11 January 1996;

**AND WHEREAS**, as part of Enbridge Bakken's 17 January 2011 application for the Bakken Pipeline Project Canada (the Project), joint leave was requested by Enbridge Westspur to sell and Enbridge Bakken to purchase Line EX-02;

**AND WHEREAS** Line EX-02 is fully described in the attached Schedule A;

**AND WHEREAS** the Board held a public hearing in respect of the Project, pursuant to Hearing Order OH-01-2011;

**AND WHEREAS** the sale and purchase of Line EX-02 is not subject to an environmental assessment pursuant to the *Canadian Environmental Assessment Act*;

**AND WHEREAS** the Board has examined the application and related submissions and considers it to be in the public interest to grant the relief requested;

**IT IS ORDERED THAT**, pursuant to paragraphs 74(1)(a) and 74(1)(b) of the NEB Act, leave is granted for Enbridge Westspur to sell and Enbridge Bakken to purchase Line EX-02; and

**IT IS FURTHER ORDERED THAT**, unless the Board otherwise directs, this Order shall expire on 22 December 2012 unless the Board has been advised that the transaction has been completed by that date.

NATIONAL ENERGY BOARD

L. George  
Acting Secretary of the Board



**SCHEDULE A**  
**Order MO-26-2011**

**Enbridge Bakken Pipeline Company Inc. (Enbridge Bakken)**  
**on behalf of Enbridge Bakken Pipeline Limited Partnership**  
**and Enbridge Pipelines (Westspur) Inc. (Enbridge Westspur)**

**Application dated 17 January 2011**

**Pursuant to Paragraphs 74(1)(a) and 74(1)(b) of the *National Energy Board Act***

**Bakken Pipeline Project Canada – Sale and Purchase of Line EX-02**  
**File OF-Fac-Oil-E256-2010-01 02**

<b>Project Type</b>	Sale (Enbridge Westspur) and Purchase (Enbridge Bakken)
<b>Facility/Infrastructure</b>	Line EX-02
<b>Approximate Length</b>	33.7 km
<b>Location (Saskatchewan)</b>	United States/Canada Border (SE 3-1-5 W2M) to Enbridge Westspur's Steelman Terminal (NE 8-4-5 W2M)
<b>Product Carried</b>	Crude Oil
<b>Outside Diameter</b>	323.9 mm (NPS 12)
<b>Minimum Wall Thickness</b>	7.14 mm
<b>Pipe Grade</b>	359 MPa
<b>Maximum Operating Pressure</b>	9,930 kPa (1,440 psi)

## Appendix III

### Certificate Conditions

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In these conditions, the expression “commencing construction” means the clearing of vegetation, ground-breaking and other forms of right-of-way preparation that may have an impact on the environment, but does not include activities associated with normal surveying activities.

Where any condition requires a filing with the Board “for approval”, Enbridge Bakken must not commence that action until the approval is issued.

In these conditions, the following terms have the following meanings:

#### **Project**

The proposed Bakken Pipeline Project Canada, in its entirety, including, but not limited to:

- the construction and operation of a crude oil pipeline (the Bakken Pipeline) and associated above-ground block valve sites approximately between Steelman, Saskatchewan (SK), and Cromer, Manitoba (MB);
- the construction and operation of associated facilities and equipment, including a pump station (the Bakken Pump Station) near Steelman, SK, and facilities at the existing Enbridge Pipelines Inc. (EPI) Cromer Terminal near Cromer, MB;
- the operation of existing Line EX-02; and
- the deactivation of a segment of Line EX-02.

#### **Section 52 Facilities**

The proposed Bakken Pipeline and associated above-ground block valve sites between the proposed Bakken Pump Station near Steelman, SK, and the existing EPI Cromer Terminal near Cromer, MB, as well as the operation of Line EX-02.

#### **Certificate**

Certificate of Public Convenience and Necessity, pursuant to section 52 of the NEB Act, authorizing the construction and operation of the Section 52 Facilities.

#### **General**

##### ***Condition Compliance***

1. Enbridge Bakken must comply with all of the conditions contained in this Certificate unless the Board otherwise directs.

### ***Facility Design, Location, Construction, Installation and Operation***

2. Enbridge Bakken must cause the approved Section 52 Facilities to be designed, located, constructed, installed, and operated in accordance with the specifications, standards, commitments made and other information referred to in its application or as otherwise agreed to during questioning or in its related submissions.

### ***Implementation of Environmental Protection***

3. Enbridge Bakken must implement or cause to be implemented all of the policies, practices, programs, mitigation measures, recommendations, procedures and its commitments for the protection of the environment included in or referred to in its application or as otherwise agreed to during questioning or in its related submissions.

### **Prior to Commencing Construction**

#### ***Commitments Tracking Table***

4. Enbridge Bakken must:
  - a) file with the Board, at least 14 days prior to commencing construction, an updated Commitments Tracking Table;
  - b) update the status of the commitments in a) on a monthly basis until completion of the Section 52 Facilities; and
  - c) maintain at its construction office(s):
    - i) the relevant environmental portion of the Commitments Tracking Table listing all regulatory commitments, including but not limited to, those commitments resulting from Enbridge Bakken's application and subsequent filings, and conditions from permits, authorizations and approvals;
    - ii) copies of any permits, approvals or authorizations for the Section 52 Facilities issued by federal, provincial or other permitting authorities, which include environmental conditions or site-specific mitigation or monitoring measures; and
    - iii) any subsequent variances to any permits, approvals or authorizations in ii).

#### ***Environmental Protection Plan***

5. Enbridge Bakken must file with the Board for approval, at least 45 days prior to commencing construction, an updated Environmental Protection Plan (EPP), including Environmental Alignment Sheets, for the Section 52 Facilities. This EPP must be a comprehensive compilation of all environmental protection procedures, mitigation measures, and monitoring commitments, as set out in Enbridge Bakken's application for the Project, its subsequent filings, evidence collected during the hearing process, or as



otherwise agreed to during questioning or in its related submissions during the OH-01-2011 proceeding. The EPP and Environmental Alignment Sheets must subsequently be updated to include any additional measures arising from all outstanding pre-construction filed studies. Construction cannot begin until the Board approves the final updated EPP.

The EPP must include, but not be limited to, the following elements:

- a) environmental procedures, including site-specific plans, criteria for implementation of these procedures, mitigation measures and monitoring applicable to all Section 52 Facilities and activities;
- b) a reclamation plan which includes a description of the condition to which Enbridge Bakken intends to reclaim and maintain the right-of-way once construction has been completed, and a description of measurable goals for reclamation;
- c) a wetland mitigation plan which includes the criteria used, and the rationale for selecting those criteria, in determining the crossing methods and mitigation measures to be employed; and
- d) evidence of consultation with appropriate federal and provincial government authorities indicating their views on the EPP, including information provided in c).

Any filings pertaining to this condition must also be submitted to appropriate federal and provincial authorities (including Manitoba Department of Water Stewardship [MWDS]), unless those authorities have specifically asked not to receive such filings.

### ***Security Management Plan***

6. Enbridge Bakken must file with the Board, at least 14 days prior to commencing construction, a Security Management Plan for construction activities pursuant to NEB Proposed Regulatory Change (PRC) 2010-01, Pipeline Security Management Program.

### ***Construction Safety Manual***

7. Enbridge Bakken must file with the Board, at least 14 days prior to commencing construction, a Construction Safety Manual.

### ***Watercourse Crossings***

8. Enbridge Bakken must file with the Board either:
  - a) upon successful completion of the horizontal directionally drilled (HDD) watercourse crossings for Alameda Reservoir West, Alameda Reservoir East and Pipestone Creek, confirmation of their completion; or

- b) in the event of any changes to the proposed HDD watercourse crossing method for Alameda Reservoir West, Alameda Reservoir East and Pipestone Creek, at least 10 days prior to crossing,
  - i) notification in writing of any such change(s) and the rationale for the change(s);
  - ii) evidence of consultation with appropriate federal and provincial government authorities and provide copies of all relevant correspondence from them, including approvals for amended watercourse crossing methods; and
  - iii) file a description of amended reclamation and re-vegetation measures, and fish and fish habitat monitoring for the affected watercourse crossings.

***Species at Risk Act- (SARA-) Listed Wildlife Survey Methodologies***

- 9. Enbridge Bakken must file with the Board, at least 30 days prior to starting each pre-construction survey for SARA-listed wildlife species:
  - a) the methodology(ies) for conducting the confirmatory surveys for SARA- listed wildlife species (including northern leopard frog and Sprague's pipit); and
  - b) a summary of consultation on the methodology with appropriate federal and provincial government authorities, including copies of correspondence from these government authorities regarding the methodology(ies).

***SARA-Listed Wildlife Surveys***

- 10. Enbridge Bakken must file with the Board, at least 15 days prior to commencing construction:
  - a) the results of the confirmatory surveys for SARA-listed wildlife species, including northern leopard frog and Sprague's pipit;
  - b) a detailed mitigation plan for each of the SARA-listed wildlife species affected by construction and operation activities;
  - c) evidence of consultation with appropriate federal and provincial government authorities and copies of correspondence from these government authorities indicating their views on the proposed mitigation; and
  - d) confirmation that the EPP and Environmental Alignment Sheets have been updated to include the mitigation measures developed or recommended as a result of the survey findings in consultation with the government authorities.

### ***Wetland Survey***

11. Enbridge Bakken must file with the Board and MDWS, at least 15 days prior to commencing construction, the methodology for conducting the wetland survey, the results of the survey and evidence demonstrating consultation with appropriate federal and provincial government authorities indicating their views on the methodology and results of the survey.

### ***Weed Management Plan***

12. Enbridge Bakken must file with the Board for approval, at least 30 days prior to commencing construction, a detailed weed management plan. This plan must describe Enbridge Bakken's immediate and long-term weed control and monitoring procedures, treatment decision criteria and accountabilities for the construction and operations phases of the Section 52 Facilities as well as for the immediate post-construction reclamation period. The filed plan must include evidence that it was designed in consultation with any concerned landowners and federal and provincial government authorities.

### ***Heritage Resources***

13. Enbridge Bakken must file with the Board, at least 30 days prior to commencing construction:
  - a) A copy of the letter of clearance received from Saskatchewan Tourism; Parks Culture and Sport – Heritage Conservation Branch; and Manitoba Culture, Heritage and Tourism; and
  - b) A statement of how Enbridge Bakken intends to address any recommendations or comments contained in a).

### ***Third Party Crossing Agreements***

14. Enbridge Bakken must file with the Board, at least 14 days prior to commencing construction, confirmation that all third party crossing agreements have been acquired.

### ***Construction Schedule***

15. Enbridge Bakken must file with the Board, at least 14 days prior to commencing construction, a detailed construction schedule(s) identifying major construction activities and must notify the Board of any modifications to the schedule(s) as such modifications occur.

### **During Clearing or Construction Activities**

#### ***Breeding Bird Surveys***

16. In the event of construction or clearing activities within restricted activity periods for all migratory birds, and non-migratory birds protected under provincial jurisdiction,



Enbridge Bakken must retain a qualified avian biologist to carry out a pre-construction survey to identify any birds and active nests in areas immediately surrounding the site(s) and must file the following with the Board within 15 days following the commencement of these construction or clearing activities:

- a) the results of the survey;
- b) mitigation, including monitoring, developed in consultation with Environment Canada, the Canadian Wildlife Service and the appropriate provincial government authorities to protect any identified migratory and non-migratory birds and their nests;
- c) mitigation, including monitoring, developed in consultation with Environment Canada and the Canadian Wildlife Service to protect any identified SARA-listed birds and their nests; and
- d) evidence to confirm that the appropriate federal and provincial government authorities were consulted on the proposed methodology for the survey, the results of the survey and the mitigation and monitoring to be used, and a description of any outstanding concerns they may have.

#### ***Joining Program and Field Pressure Testing Program***

17. Enbridge Bakken must file with the Board the following programs within the time specified:
- a) field joining program – 14 days prior to joining; and
  - b) field pressure testing program – 14 days prior to pressure test.

#### ***Construction Progress Reports***

18. Enbridge Bakken must file construction progress reports with the Board on a monthly basis in a form satisfactory to the Board. The reports must include:
- a) information on the activities carried out during the reporting period, any environmental, socio-economic, security and safety issues and issues of non-compliance, and the measures undertaken for the resolution of each issue and non-compliance; and
  - b) information on consultation activities undertaken with stakeholders and Aboriginal groups for the Section 52 Facilities during construction, including a summary of any issues or concerns raised and a description of how any concerns or issues were addressed.

## **Post-Construction / During Operations**

### ***Emergency Preparedness and Response Manual***

19. Enbridge Bakken must file with the Board, at least 14 days prior to applying for Leave to Open, three updated copies of its Emergency Preparedness and Response Manual.

### ***Post-Construction Environmental Monitoring Report***

20. On or before the 31<sup>st</sup> of January following each of the first, third and fifth growing seasons after the completion of right-of-way reclamation and final clean-up activities for the Project, Enbridge Bakken must file with the Board and appropriate federal and provincial government authorities, a Post-Construction Environmental Monitoring Report that:
  - a) describes the methodology used for monitoring, the criteria used for evaluating success and the results found;
  - b) assesses the effectiveness of the mitigation measures applied during construction against the criteria for success;
  - c) identifies any deviations from plans and alternate mitigation applied;
  - d) identifies locations (e.g., on a map or diagram, in a table) where environmental issues arose during construction and where corrective actions were taken;
  - e) identifies the current status of the issues identified (resolved or unresolved);
  - f) includes details of consultation undertaken with appropriate provincial and federal authorities; and
  - g) provides proposed measures and the schedule that Enbridge Bakken will implement to address any unresolved issues or concerns.

### ***Wetland Restoration***

21. Within one year following the close of the five-year post-construction monitoring program, Enbridge Bakken must file with the Board and appropriate federal and provincial government authorities including MDWS, a Wetland Restoration/Compensation Plan for the Project for all wetlands where wetland function has not been fully restored by the close of the program. This plan must include evidence that it was developed in consultation with appropriate federal and provincial government authorities, as well as details of any proposed alternatives to the above authorities' recommendations and the rationale for proposing those alternatives.

## **After the Project is Placed in Service**

### ***Condition Compliance by a Company Officer***

22. Within 30 days of the date that the approved Project is placed in service, Enbridge Bakken must file with the Board a confirmation, by an officer of the company, that the approved Project was completed in compliance with all applicable conditions in this Certificate. If compliance with any of these conditions cannot be confirmed, the officer of the company must file with the Board details as to why compliance cannot be confirmed. The filing required by this condition must include a statement confirming that the signatory to the filing is an officer of the company.

## **Certificate Expiration**

### ***Sunset Clause***

23. Unless the Board otherwise directs prior to 22 December 2012, this Certificate will expire on 22 December 2012, unless construction in respect of the Section 52 Facilities has commenced by that date.



## CEA Act ESR

National Energy  
Board



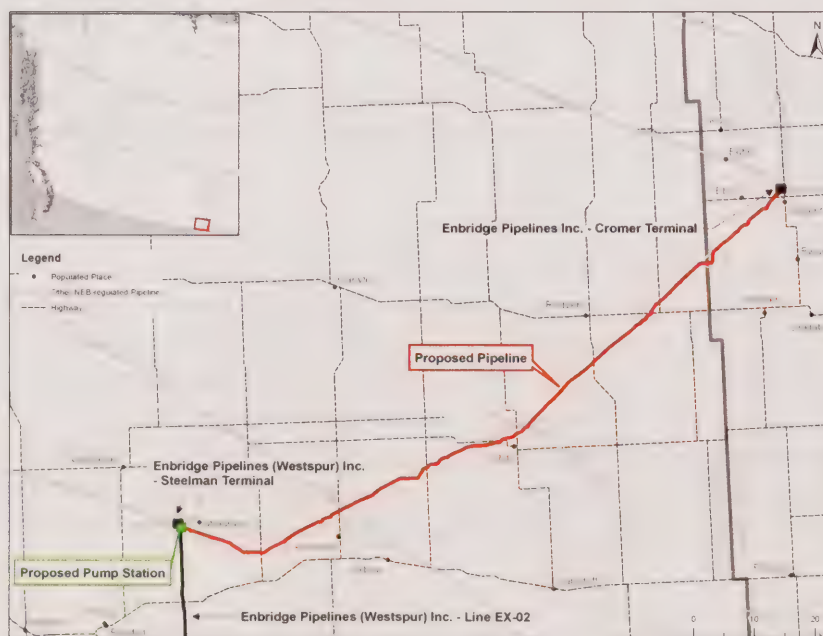
Office national  
de l'énergie

### ENVIRONMENTAL SCREENING REPORT

Pursuant to the *Canadian Environmental Assessment Act* (CEA Act)

### Bakken Pipeline Project Canada

<b>Applicant Name:</b>	Enbridge Bakken Pipeline Company Inc., on behalf of Enbridge Bakken Pipeline Limited Partnership		
<b>Application Date:</b>	17 January 2011 (Project Description: 19 October 2010)	<b>CEA Act Registration Date:</b>	26 October 2010
<b>National Energy Board (NEB) File Numbers:</b>	OF-Fac-Oil-E256-2010-01 0101 / OF-Fac-Oil-E256- 2010-01 02	<b>Canadian Environmental Assessment Registry Number:</b>	10-01-58441
<b>CEA Act Law List Trigger(s):</b>	Sections 52 and 58 of the <i>National Energy Board Act</i>	<b>CEA Act Determination Date:</b>	5 December 2011



## SUMMARY

This report is an Environmental Screening Report (ESR) under the *Canadian Environmental Assessment Act* (CEA Act) for the Bakken Pipeline Project Canada (the Project) as proposed by Enbridge Bakken Pipeline Company Inc. (Enbridge Bakken), on behalf of Enbridge Bakken Pipeline Limited Partnership. On 17 January 2011, Enbridge Bakken applied to the National Energy Board (Board or NEB) for authorization to construct and operate the Project between Steelman, Saskatchewan (SK) and the existing Enbridge Pipelines Inc. (EPI) Cromer Terminal near Cromer, Manitoba (MB). Once complete, the Project would be capable of transporting 23,180 cubic metres per day of crude oil.

The Project would involve the construction and operation of approximately 123.4 kilometres (km) of new 406.4 millimetre (16-inch) outside diameter crude oil pipeline and related facilities, including a new pump station adjacent to the existing Enbridge Pipelines (Westspur) Inc. (Enbridge Westspur) Steelman Terminal, five above-ground block valve sites along the pipeline right-of-way (RoW) and a new pig receiver at EPI's Cromer Terminal. Approximately 105 km of pipeline would be located in SK and 18.4 km in MB, with 77.3 km of the entire RoW being contiguous to existing linear disturbances and 46.1 km being new and non-contiguous. Some temporary infrastructure (e.g., staging areas) would be required for construction and a new permanent access road would be needed for the pump station. The proposed pipeline would cross several watercourses, drainages, water bodies and wetlands. This pipeline would serve as an extension of the existing 33.7 km long Line EX-02, which Enbridge Bakken is proposing to acquire (from Enbridge Westspur) and operate as part of the Project. Enbridge Bakken would deactivate the 354.6 m long portion of that pipeline between its proposed pump station and Steelman Terminal. Construction of the proposed pump station and facilities at EPI's Cromer Terminal is anticipated to begin in the second quarter of 2012. Pipeline construction is scheduled to begin in the third quarter of 2012. The proposed in-service date for the Project, as a whole, is the first quarter of 2013.

The NEB is the Federal Environmental Assessment Coordinator for this Project. In this role, the NEB coordinated the involvement of federal departments with an interest in the Project. Transport Canada has declared itself a Responsible Authority while the Canadian Transportation Agency, Environment Canada, Fisheries and Oceans Canada, Health Canada and Natural Resources Canada have identified themselves as Federal Authorities (FAs) in possession of specialist or expert information or knowledge.

This ESR was prepared as part of the NEB's responsibilities under the CEA Act and incorporates information provided by Enbridge Bakken, FAs, landowners, Aboriginal groups, other interested parties and the public. The analysis in this ESR is based on the evidence on the record for the public hearing process held with respect to the Project, the full documentation of which can be found at the following internet hyperlink: <https://www.neb-one.gc.ca/ll-eng/livmlink.exe?func=ll&objId=661686&objAction=browse&sort=-name>

Comments received on the draft ESR were considered by the Board in its preparation of the final ESR. The ESR will also be used by Transport Canada in making its environmental assessment determination during the course of the Project.

As detailed in this ESR, a number of potential adverse environmental effects were identified, including effects on migratory birds, *Species at Risk Act*-listed species, wetlands and traditional land use. The NEB is of the view that, with the implementation of Enbridge Bakken's proposed environmental protection procedures and mitigation measures, compliance with the Board's regulatory requirements and the NEB's Proposed Conditions included in this ESR, the Project is not likely to cause significant adverse environmental effects.



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## LIST OF ACRONYMS AND ABBREVIATIONS

Bakken LP	Enbridge Bakken Pipeline Limited Partnership
Bakken Pipeline	the pipeline proposed as part of the Bakken Pipeline Project Canada
Bakken Pump Station	the pump station proposed as part of the Bakken Pipeline Project Canada
Board or NEB	National Energy Board
CDC	Conservation Data Centre
CEA Act	<i>Canadian Environmental Assessment Act</i>
CEARIS	Canadian Environmental Assessment Registry Internet Site
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
CTKFN	Carry the Kettle First Nation
DFO	Fisheries and Oceans Canada
EA	environmental assessment
EC	Environment Canada
Enbridge Bakken	Enbridge Bakken Pipeline Company Inc.
Enbridge Westspur	Enbridge Pipelines (Westspur) Inc.
EPI	Enbridge Pipelines Inc.
EPP	Environmental Protection Plan
ESA	Environmental and Socio-Economic Assessment
ESR	Environmental Screening Report
FA	Federal Authority
FSIN	Federation of Saskatchewan Indian Nations
ha	hectare
HDD	horizontal directional drilling
HRIA	Historical Resources Impact Assessment
KP	kilometre post
LSA	local study area



m	metre
MB	Manitoba
MDWS	Manitoba Department of Water Stewardship
MIT	Manitoba Infrastructure and Transportation
mm	millimetre
NEB Act	<i>National Energy Board Act</i>
ND	North Dakota
OD	outside diameter
OMFN	Ocean Man First Nation
PCM	post-construction monitoring
PRNFN	Pheasant Rump Nakota First Nation
Project	the proposed Bakken Pipeline Project Canada
RA	Responsible Authority
RAP	restricted activity period
Reasons	the National Energy Board's OH-01-2011 Reasons for Decision
RM	Rural Municipality
RoW	right-of-way
RPFN	Red Pheasant First Nation
RSA	regional study area
SARA	<i>Species at Risk Act</i>
SCADA	supervisory control and data acquisition
Scope	Scope of the Environmental Assessment
Section 52 Facilities	the proposed pipeline and associated above-ground block valve sites between the proposed pump station near Steelman, Saskatchewan, and the existing Enbridge Pipelines Inc. Cromer Terminal near Cromer, Manitoba, as well as the proposed operation of existing Line EX-02
Section 58 Facilities	the proposed pump station near Steelman, Saskatchewan, and proposed facilities at the existing Enbridge Pipelines Inc. Cromer Terminal near Cromer, Manitoba

SFN	Sakimay First Nation
SHCB	Saskatchewan Tourism, Parks, Culture and Sport – Heritage Conservation Branch
SK	Saskatchewan
TC	Transport Canada
TFCC	Treaty Four Council Chiefs
TLU	traditional land use
US	United States
WBFN	White Bear First Nation

## **1.0 INTRODUCTION**

### **1.1 Project Overview**

On 17 January 2011, Enbridge Bakken, on behalf of Enbridge Bakken Pipeline Limited Partnership (Bakken LP), applied to the National Energy Board (NEB or the Board) for authorization to construct and operate the Bakken Pipeline Project Canada (the Project). The Project consists of: the acquisition and operation of the existing 33.7 kilometre (km) long Line EX-02, which is currently owned by Enbridge Pipelines (Westspur) Inc. (Enbridge Westspur); and the construction and operation of a new 123.4 km long crude oil pipeline (including a new pump station and other facilities) between Steelman, Saskatchewan (SK), and Cromer, Manitoba (MB), which would serve as an extension to Line EX-02. Enbridge Bakken is also proposing to deactivate the small portion of Line EX-02 leading up to Enbridge Westspur's existing Steelman Terminal.

Approximately 46.1 km of the proposed pipeline (the Bakken Pipeline) would require new right-of-way (RoW) that is non-contiguous with existing linear disturbances. Along the entire length of this pipeline, a permanent 30 metre (m) wide RoW would be required with 10 m of temporary workspace, as necessary. Additional temporary workspace would be required on a site-specific basis at highway, road, railway, pipeline and watercourse crossings, as well as at other locations to accommodate pipeline construction activities. Some temporary infrastructure (e.g., staging areas) would be required for construction and a new permanent access road would be needed for the proposed pump station (the Bakken Pump Station) to be located near Steelman.

Pending regulatory approvals, construction of the Bakken Pump Station and facilities at the existing Enbridge Pipelines Inc. (EPI) Cromer Terminal, is scheduled to commence during quarter two of 2012. Pipeline construction is scheduled to occur during quarter three of 2012. Enbridge Bakken anticipates that the Project, as a whole, would be operational in the first quarter of 2013.

Section 4.0 provides a detailed description of the work associated with the Project.

### **1.2 Rationale for the Project**

The Project is required to link crude oil production from the Bakken Formation area of North Dakota (ND) with the existing EPI Mainline System. Crude oil producers in the Bakken production area of ND and eastern Montana have established and potential oil reserves which are not currently connected to market. Crude oil production from ND would be linked to the Project via an existing crude oil pipeline, Line EX-02, running from Berthold, ND to Steelman, SK. The Project would enable ND and Montana producers to connect their oil reserves to the EPI Mainline System in order to access markets in both Canada and the United States (US).

### **1.3 Baseline Information and Sources**

The analysis for this Environmental Screening Report (ESR) is based on information from the following sources:

- Project application (Volume 1 – NEB Applications, Volume II – Environmental and Socio-Economic Assessment [ESA], Volume IIA – ESA Appendices);



- Enbridge Bakken's supplementary filings to its application for the Project;
- responses to information requests (by Enbridge Bakken, Intervenor);
- various manuals referenced in the Project application (e.g., EPI's *Environmental Guidelines for Construction*, 2003);
- submissions from the public and other interested parties, including letters of comment and comments on the draft ESR; and
- evidence submitted at the public oral hearing.

Filed information pertaining to the Project can be found within 'Regulatory Documents' on the NEB's website ([www.neb-one.gc.ca](http://www.neb-one.gc.ca)). For more details on how to obtain documents, please contact the Secretary of the NEB at the address specified in Section 10.0 of this report.

## 2.0 ENVIRONMENTAL ASSESSMENT (EA) PROCESS

On 19 October 2010, Enbridge Bakken filed a Project Description with the NEB regarding the proposed Project. This action initiated the *Canadian Environmental Assessment Act* (CEA Act) EA process. On 17 January 2011, Enbridge Bakken filed its application for the Project pursuant to various sections/subsections of the *National Energy Board Act* (NEB Act). Its proposals under sections 52 and 58 both trigger the CEA Act *Law List Regulations*, thereby requiring the preparation of this ESR.

### 2.1 Government Participation in the EA Coordination Process

The NEB is the Federal Environment Assessment Coordinator for the Project. On 28 October 2010, pursuant to section 5 of the CEA Act *Regulations Respecting the Coordination by Federal Authorities of Environmental Assessment Procedures and Requirements*, the NEB issued a Federal Coordination Notification letter to identify the potential involvement of federal departments in the EA process. The responses are summarized below:

**Table 1: Role of Federal Departments in the CEA Act Process**

Responsible Authorities (RAs) [with CEA Act Triggers]	Federal Authorities (FAs) in Possession of Specialist or Expert Information or Knowledge
NEB: sections 52 and 58 of the NEB Act Transport Canada (TC): subsection 108(4) of the NEB Act (any watercourse crossing [pipeline crossings and bridges] of a navigable waterway)	Fisheries and Oceans Canada (DFO) Environment Canada (EC) Natural Resources Canada Canadian Transportation Agency Health Canada

The Federal Coordination Notification letter was also sent to provincial authorities in SK and MB. SK Environment and the MB Department of Water Stewardship (MDWS) expressed interest in monitoring the EA process.

Subsection 6.2 outlines issues/comments raised by the various involved or interested departments.

## **2.2 Opportunities for Public Input into the EA**

NEB Hearing Order OH-01-2011 was issued on 16 March 2011, describing the process and requirements for the oral public hearing for the Project. The NEB's EA process allowed for a number of opportunities for the public, including government authorities and Aboriginal groups, to participate and provide input into the EA. This included providing comments on the draft scope of the EA and the List of Issues, filing a letter of comment, making an oral statement at the hearing or seeking Intervenor status. The Government Participant role was offered to federal and provincial government authorities to allow them to more actively participate in the hearing process without becoming Intervenors.

### **2.2.1 Submissions to the Board**

Throughout the course of the EA process, the Board received several submissions pertaining to Project-related EA matters. The areas of primary concern are highlighted in Subsection 6.2.

### **2.2.2 Draft Scope of the EA**

On 14 December 2010, the NEB solicited comments from RAs, FAs and interested provincial authorities on a preliminary draft scope of the EA for the Project. The document was also posted on the online Canadian Environmental Assessment Registry Internet Site (CEARIS) on this date.

A draft scope of the EA was subsequently attached to the Hearing Order as Appendix V. With this action, the NEB once again solicited comments from RAs, FAs, provincial agencies, as well as the general public, on the draft scope of the EA. The parties were provided with an opportunity to suggest an amendment or addition to the draft scope by filing suggestions with the Board by 29 April 2011. Comments received on the document are described in Subsection 6.3.1.

### **2.2.3 NEB Hearing**

The oral public hearing for the Project, pursuant to Hearing Order OH-01-2011, was held in Regina, SK from 4 to 5 October 2011.

### **2.2.4 Draft ESR**

On 1 November 2011, the NEB sent a letter to interested parties inviting comments on the draft ESR. Further, a notice for public comment on the draft ESR was posted on the CEARIS. See Subsection 6.3.2 for details on the comments received.

## **3.0 SCOPE OF THE EA**

The Scope of the EA (Scope) is composed of three parts:

1. Scope of the Project;
2. Factors to be Considered; and
3. Scope of the Factors to be Considered.



The Scope, as determined by the RAs in consultation with the FAs and the public, is included in this ESR as Appendix 1 and provides detailed information on these three parts.

Section 4.0 below expands upon the “Scope of the Project”.

#### 4.0 DESCRIPTION OF THE PROJECT

The following table provides information on each Project component throughout the three phases of the Project: construction, operations and abandonment.

**Table 2: Details of the Project**

Physical Works and/or Activities	
<i>Construction Phase – Timeframe:</i>	<i>Pending regulatory approvals, construction of the Bakken Pump Station and facilities at Cromer Terminal beginning in the second quarter of 2012; Bakken Pipeline construction beginning in the third quarter of 2012.</i>
<ul style="list-style-type: none"> <li>Construction of the Bakken Pipeline: approximately 123.4 km (105 km in SK and 18.4 km in MB) of new 406.4 millimetre (mm) [16-inch] outside diameter crude oil pipeline between the proposed Bakken Pump Station at Steelman, SK (at NE-8-4-5 W2M) and EPI’s existing Cromer Terminal at Cromer, MB (at NE-17-9-28 W1M).</li> <li>Construction of five above-ground check valve sites along the Bakken Pipeline (at NE-13-7-31 W2M, NE-20-4-2 W2M, NE-27-4-2 W2M, NW-18-4-2 W2M and SW-17-9-28 W1M) which would be equipped with radio communication capability.</li> <li>77.3 km of the proposed RoW is contiguous with existing linear disturbances, 46.1 km is non-contiguous.</li> <li>RoW width would generally be 40 m, consisting of approximately 30 m of permanent RoW and approximately 10 m of temporary work space. Additional temporary work space would be required at highway, road, railway, pipeline and watercourse crossings, as well as at other selected locations.</li> <li>Construction of 13 watercourse crossings, including Alameda Reservoir West, Alameda Reservoir East, Antler River and Auburnton, Lightening, Gainsborough, Graham, Jackson, Stony and Pipestone Creeks. Enbridge Bakken has proposed using a horizontal directional drilling (HDD) method to cross Alameda Reservoir West, Alameda Reservoir East and Pipestone Creek. For all other crossings, Enbridge Bakken has proposed to use isolated or open cut methods.</li> <li>Construction of the Bakken Pump Station and associated facilities (on approximately 2.7 hectares [ha]) at Steelman, SK and a pig receiver system at EPI’s Cromer Terminal.</li> <li>A new permanent access road would be required for the Bakken Pump Station. Existing or temporary access roads would be used during Bakken Pipeline construction.</li> <li>Deactivation of 354.6 m of Line EX-02 between the existing Enbridge Westspur Steelman Terminal and the proposed Bakken Pump Station.</li> <li>Construction activities would include clearing, stripping, stockpiling, grading, trenching, pipe laying, equipment installation, backfilling, hydrostatic testing (where required) and final reclamation.</li> </ul>	
<i>Operations Phase – Timeframe:</i>	<i>Service life of the Project (estimated in-service date: first quarter 2013)</i>
<ul style="list-style-type: none"> <li>Ongoing transmission of oil in the Bakken Pipeline and the 33.7 km long Line EX-02.</li> <li>Occasional vehicle operation.</li> <li>Ongoing operation of electrical pumps at the Bakken Pump Station.</li> <li>Maintenance of access roads.</li> <li>Vegetation control for non-native and noxious weed species.</li> <li>Aerial RoW patrols to visually inspect for environmental and integrity issues.</li> <li>Periodic running of in-line inspection tools to inspect the Bakken Pipeline’s interior.</li> </ul>	



<b>Physical Works and/or Activities</b>
<ul style="list-style-type: none"> <li>Maintenance digs would be conducted in the event that an actual or suspected pipeline integrity problem is identified, and subsequent reseeding and reclamation would be undertaken.</li> </ul>
<i>Abandonment Phase – Timeframe: At the end of the service life of the Project</i>
<ul style="list-style-type: none"> <li>Pursuant to the NEB Act, an application would be required to abandon the facility, at which time the NEB would assess the environmental effects.</li> </ul>

No physical activities are required along the Line EX-02 RoW. Line EX-02 consists of 33.7 km of 323.9 mm (12-inch) crude oil pipeline running from the US/Canada border (at SE 3-1-5-W2M) to Enbridge Westspur's Steelman Terminal. It represents the Canadian portion of a 137.4 km long crude oil pipeline that originates in Berthold, ND.

## **5.0 DESCRIPTION OF THE ENVIRONMENT**

This section describes the environmental and socio-economic setting along the approximately 123.4 km long Bakken Pipeline route and in the area of the Bakken Pump Station. Known reference points along the route are referred to as kilometre posts (KP) and are used to describe the locations of features along the RoW for construction, operations and maintenance purposes. KP 0.0 is located at the proposed Bakken Pump Station (at NE-8-4-5 W2M) in SK and KP 123.4 is located at EPI's Cromer Terminal (at NE-17-9-28 W1M) in MB. Project activities at the Cromer Terminal would take place within the existing industrial site.

### ***Geographical Information, Human Occupancy and Land Use***

- The Project does not traverse any federally-owned or administered land and is made up of 93.7% private and 6.3% provincial Crown land in SK, and 100% private land in MB (in total: 98.5% private land, 1.5% provincial Crown land).
- Agriculture and oil and gas extraction are the primary land use activities occurring along the proposed route and in the general area. While ungulate and game bird hunting takes place, there are limited opportunities for outfitting and trapping due to the amount of privately-owned land.
- The Project lies within the Rural Municipalities (RMs) of Antler No. 61, Browning No. 34, Coalfields No. 4, Enniskillen No. 3, Reciprocity No. 32, Storthoaks No. 31, Moose Creek No. 33 in SK, and the RM of Pipestone No. 162 in MB.
- The nearest park is Moose Mountain Provincial Park, located approximately 50 km north of the Project in SK.
- The nearest community to the Bakken Pump Station is Steelman, SK, located approximately 3.5 km east. The nearest permanent residence to this station is 525 m east.

### ***Aboriginal People and Traditional Land and Resource Use***

- Enbridge Bakken, the Board, RAs and the Major Projects Management Office identified a total of 28 Aboriginal groups in SK and MB that may be potentially-affected by the Project and were contacted by Enbridge Bakken.
- The Project traverses the southwestern portion of Treaty 2 areas in SK and MB.

- The Project traverses traditional territories claimed by Carry the Kettle First Nation (CTKFN), Red Pheasant First Nation (RPFN), Pheasant Rump Nakota First Nation (PRNFN), Ocean Man First Nation (OMFN), Sakimay First Nation (SFN) and White Bear First Nation (WBFN). The Federation of Saskatchewan Indian Nations (FSIN) and Treaty Four Council of Chiefs (TFCC) have also indicated potential impacts on the traditional territories of their member First Nations.
- CTKFN and WBFN stated that they continue to practice traditional land use (TLU) activities in proximity to the proposed route, including hunting, fishing and plant gathering for traditional and medicinal use. CTKFN also indicated that its members practice trapping in the Project area.

### ***Terrain and Soils***

- The Project lies within the Moist Mixed Grassland and Aspen Parkland ecoregions of the Prairie Ecozone.
- The Project traverses undulating and rolling glacial till terrain, level lacustrine deposit areas and drainage valleys associated with the watercourse crossings.
- Average topsoil depths are typically in the 10 to 30 centimetre range. Soils associated with the Moist Mixed Grassland ecoregion are Dark Brown Chernozems, while soils associated with the Aspen Parkland ecoregion are Black Chernozems. Saline subsoils are present along approximately 16.6% of the proposed route. Soils containing gravel or high coarse fragment content are present along approximately 3.4% of the proposed route.
- The Project does not encounter any sites listed on the 2010 Federal Contaminated Sites Inventory; however, approximately 150 product release sites were recorded within 1 km of the SK portion of the route between 1991 and 2009. Recorded product release substances include salt water, oil, emulsion and natural gas.

### ***Vegetation***

- The Moist Mixed Grassland and Aspen Parkland ecoregions are highly-impacted by cultivation and agricultural production. Lands along the proposed route consist of approximately 59% cultivated cropland, 13% wetland, 9% hayland, 8% tame pasture, 8% modified grassland, 2% wooded upland and 1% native grassland, with minor inclusions of water, riparian areas and shrubland.
- Desktop studies determined that 113 rare plants species, sub-species or varieties could potentially-occur in the general area. Twenty-eight of these species have been previously-recorded within 10 km of the Project.
- During plant surveys for the Project, three rare plant species (listed in the SK Conservation Data Center [CDC]) were observed in SK. No species listed on Schedule 1 of the *Species at Risk Act* (SARA), by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), or designated under the MB CDC were observed.
- A total of 49 weed species were observed during field surveys in SK and MB. Of these, 48 are designated as noxious weeds in MB and 36 are designated as noxious in SK.



### ***Watercourses and Aquifers***

- The Project is located within the Souris River Watershed and the Bakken Pipeline would cross 13 watercourses: Alameda Reservoir West; Alameda Reservoir East; Antler River; Auburnton, Lightening, Gainsborough, Graham, Jackson, Stony and Pipestone Creeks; and three tributaries associated with Lightening, Gainsborough and Pipestone Creeks.
- The Bakken Pump Station would not be located within 30 m of a watercourse.
- All of the watercourses to be crossed are tributaries to the Souris River. Three of the watercourses crossed by the Project have been deemed navigable by TC's Navigable Waters Protection Program: Alameda Reservoir West, Alameda Reservoir East and Pipestone Creek.
- The proposed route traverses several sand, gravel and shale aquifers with variably-elevated concentrations of sulphate and sodium chloride ions, as well as total dissolved solids.
- A total of 69 recorded water wells were identified within the Project area, including 61 domestic use wells and one municipal use well.

### ***Fish and Fish Habitat***

- Of the 13 watercourses to be crossed, 11 are considered fish-bearing. Sportfish species are potentially-present in seven of these watercourses.
- There are three species of sportfish (northern pike, walleye, yellow perch) and seven species of non-sportfish (e.g., white sucker, brook stickleback) that may occur in the crossed watercourses.
- No fish species listed federally on Schedule 1 of the SARA or by the COSEWIC, or provincially as a species of concern, were found during field studies.

### ***Wetlands***

- The Bakken Pipeline would traverse approximately 46.8 ha of wetland habitat (372 wetlands), comprising approximately 12.6% of the total RoW length. Five wetland classes were identified along the proposed route: Class I - ephemeral pond, Class II - temporary ponds, Class III – seasonal ponds or lakes, Class IV – semi-permanent ponds or lakes and Class V – permanent ponds or lakes.
- The majority of the wetlands traversed by the Bakken Pipeline have been previously-altered by cultivation and livestock use. Due to the degree of human alteration, wetland health assessments were only conducted on Class III to Class V wetlands. Of the wetlands assessed, 6.1% were rated as 'Healthy', 39.8% as 'Healthy with Problems' and 54.1% as 'Unhealthy'.
- The Bakken Pump Station is located in close proximity to three wetlands having a total area of 0.24 ha. The wetlands are Class III, Class IV and Class V. Enbridge Bakken is proposing to construct a permanent access road through the Class V wetland.



### ***Wildlife and Wildlife Habitat (COSEWIC-listed species at risk and provincially-listed species)***

- In both SK and MB, the Project would mainly traverse agricultural lands interspersed with numerous wetlands and small remnant areas of native grassland and parkland habitat.
- The general Project area provides habitat for many species of migratory and non-migratory birds and traverses two migratory bird habitat sub-regions, as well as nationally- and regionally-important duck breeding habitat areas. At least 15 COSEWIC- and/or provincially-listed bird species of varying conservation status levels potentially occur in the area. Two of these species were observed during field surveys, including Baird's sparrow and bobolink.
- Amphibians and reptiles of management concern confirmed and potentially-occurring in the area include Plains spadefoot toad, western hognose snake, smooth green snake and red-bellied snake.
- Mammals of management concern confirmed or potentially-occurring in the area include mule deer and American badger (noted during field surveys), cougar, bobcat, long-tailed weasel, grasshopper mouse, olive-backed pocket mouse, eastern cottontail and prairie shrew.
- In SK, the Bakken Pipeline route traverses a Wildlife Habitat Protection Area between approximately KP 48 and KP 50. The habitat within this area is a mixture of native grassland, shrubland with aspen stands, riparian area and a watercourse. Wildlife observed during baseline surveys at this location included several bird species.

### ***Wildlife Species at Risk (listed on Schedule 1 of the SARA)***

- The Project may affect 15 wildlife species, or their habitat, listed on Schedule 1 of the SARA: burrowing owl and piping plover (Endangered); chimney swift, common nighthawk, ferruginous hawk, loggerhead shrike, red-headed woodpecker, Sprague's pipit and Dakota skipper (Threatened); long-billed curlew, yellow rail, Great Plains toad, northern leopard frog, snapping turtle and monarch butterfly (Special Concern).
- During avian surveys, 30 Sprague's pipit observations were made throughout native grassland areas in the western half of the Project area. This species' preferred habitat includes un-grazed to moderately-grazed native grassland that provides moderate vegetative cover, whereas cultivated land, tame grasslands and heavy shrub areas are generally avoided.
- Northern leopard frogs were detected at 16 locations during amphibian surveys along the proposed route. This species is dependent upon small, fishless ponds and lakes for breeding. Although evidence of northern leopard frog breeding was not observed during field surveys, several wetlands intersected or closely approached by the proposed route have potential to provide breeding or overwintering habitat.
- One long-billed curlew was observed near the proposed RoW during early season field surveys. This species prefers native grassland habitat and occurrences in southeast SK are usually spring transients as opposed to breeders. Since long-billed curlews were not observed during the breeding songbird survey, Enbridge Bakken concluded that the species is likely a transient to the general Project area.

- During field surveys, one common nighthawk was observed. Common nighthawk is known to readily nest within disturbed landscapes and suitable habitat exists throughout the Project area.

### ***Air Quality and Acoustic Environment***

- Air quality in the Project area is characteristic of that expected in a rural area that is not directly influenced by industrial emissions. However, local air quality is indirectly influenced by coal-fired power generation at Estevan, oil battery sites and gas plants. The entire proposed route would traverse agricultural land and existing oil and gas facilities. The route also crosses existing roads where air quality is a function of emissions and dust from vehicle traffic and cultivation.
- Ambient noise in the general area is primarily caused by agricultural activities, oil and gas facilities and vehicle/rail traffic.

### ***Heritage, Archaeological and Paleontological Resources***

- A Historical Resources Impact Assessment (HRIA) was conducted along the entire proposed route. Within SK, eight previously-recorded archaeological sites were recorded within 1 km of the Project and one new historical resource site (site DhMn-79) was discovered. The location and details of this site were recorded on a SK Archaeological Resource Record and submitted to the Province. Within MB, no previously-recorded archaeological sites were recorded within 1 km of the Project, with the closest site located over 5 km from the proposed route. There were no new historical resource sites discovered in MB.

## **6.0 COMMENTS FROM THE PUBLIC**

### **6.1 Project-Related Issues/Comments Raised through Consultation Conducted by Enbridge Bakken**

Enbridge Bakken consulted and contacted various interested and potentially-affected parties including Aboriginal groups, federal and provincial government authorities, RMs and the public. This was completed through mail-outs, telephone calls and face-to-face meetings. Issues raised by the public and these groups contributed to the identification of potential adverse environmental effects. Information and concerns raised through this consultation have been considered within the Board's environmental effects analysis (Section 8.0).

The RMs of Antler, Browning, Coalfields and Pipestone submitted letters of support for the Project. These letters highlighted the benefits of the Project such as reduced tanker-truck traffic impacts on local infrastructure (e.g., roads, bridges, etc.), increased road safety, extension of road surface life and decreased costs associated with highway maintenance.

#### **6.1.1 Comments from Aboriginal Groups**

Enbridge Bakken contacted a number of Aboriginal groups about the Project, including CTKFN, RPFN, PRNFN, OMFN, SFN, WBFN, FSIN and TFCC. Aboriginal groups indicated that, as traditional resource users, the Project would impact their ability to hunt, trap, fish and gather



medicinal and traditional plants. Aboriginal groups were also concerned about mitigation measures to be used when encountering undiscovered artifacts, damage to identified artifacts, preservation of plant and wildlife as well as local environmental impacts.

RPFN submitted a letter to the Board on 20 September 2011 requesting its Intervenor status be withdrawn given that it no longer has an Aboriginal interest in the Project.

OMFN and SFN submitted letters to the Board on 27 September 2011 and 4 October 2011, respectively, indicating that they have resolved all of their issues of concern arising from the Project and that they support the Project application.

During the hearing, Enbridge Bakken stated that it is committed to ongoing engagement with First Nations communities in proximity to the Project. This includes working with Aboriginal groups to mitigate potential project-specific impacts on traditional land and resource use. The issue of potential impacts on traditional Aboriginal land and resource use is further considered in section 8.3.2.7 of this ESR.

#### **6.1.2 Comments from Landowners**

Contacted landowners expressed concerns about weed management measures outlined in restoration plans, drainage issues due to depth of cover in specific areas, contaminated equipment entry onto organic farms and general impacts of the chosen route on current farming operations.

To address this, Enbridge Bakken engaged with the concerned landowner to respond to weed management matters. Enbridge Bakken also agreed to increasing the depth of cover at site-specific drainage routes, adjusting the pipeline route to reduce potential impacts on farming operations and cleaning equipment prior to RoW entry on organic farms.

#### **6.2 Project-Related Issues Raised in Comments Received by the NEB**

Several Project-related issues/comments were raised by the public to the Board. Table 3 lists the topics to which these interests were related. To view the documents, please refer to the Project folder in the 'Regulatory Documents' area of the NEB's website ([www.neb-one.gc.ca](http://www.neb-one.gc.ca)), or click on the Filing Identification numbers provided. If computer access is not available, you may obtain copies through the Secretary of the Board via the contact information in Section 10.0.



**Table 3: Submissions to the NEB**

Submitter	Topic(s) of Interest	Submission Date	Filing ID
EC	<ul style="list-style-type: none"> <li>▪ Migratory birds</li> <li>▪ Species at risk</li> <li>▪ Wetlands</li> <li>▪ Invasive species</li> <li>▪ Reclamation</li> <li>▪ Emergency prevention, preparedness and response planning</li> </ul>	17 June 2011	A1Z8Y4
DFO	<ul style="list-style-type: none"> <li>▪ Fish and fish habitat</li> </ul>	30 June 2011	A2A1V2
MDWS	<ul style="list-style-type: none"> <li>▪ Water quality</li> <li>▪ Habitat compensation</li> <li>▪ Fish and fish habitat</li> <li>▪ Post-construction monitoring</li> <li>▪ Watercourse crossings</li> <li>▪ Wetlands</li> <li>▪ Invasive species</li> <li>▪ Emergency response plans</li> </ul>	11 July 2011	A2A3Y9
David Slade	<ul style="list-style-type: none"> <li>▪ Environmental degradation</li> </ul>	7 June 2011	A1Z6G3
CTKFN	<ul style="list-style-type: none"> <li>▪ Impact on traditional activities for resource users (i.e., hunting, fishing, trapping, and plant gathering)</li> </ul>	30 June 2011	A2A1F1
FSIN	<ul style="list-style-type: none"> <li>▪ Impact on traditional activities for resource users</li> </ul>	14 April 2011	A1Y7S1
PRNFN	<ul style="list-style-type: none"> <li>▪ Environmental impact</li> </ul>	29 April 2011	A1Y9E3
TFCC	<ul style="list-style-type: none"> <li>▪ Impact on traditional activities for resource users</li> </ul>	29 April 2011	A1Y9E1
WBFN	<ul style="list-style-type: none"> <li>▪ Impact on First Nations rights and interests and traditional activities for resource users (i.e., hunting, fishing and plant gathering)</li> </ul>	4 October 2011	A2E2A8
RM of Antler	<ul style="list-style-type: none"> <li>▪ Reduced tanker-truck traffic</li> <li>▪ Decreased highway maintenance costs</li> </ul>	28 June 2011	A2A0Q4
RM of Browning	<ul style="list-style-type: none"> <li>▪ Reduced tanker-truck traffic</li> <li>▪ Increased road safety</li> <li>▪ Decreased highway maintenance costs</li> </ul>	28 June 2011	A2A0G9
RM of Coalfields	<ul style="list-style-type: none"> <li>▪ Reduced tanker-truck traffic</li> <li>▪ Decreased highway maintenance costs</li> </ul>	28 June 2011	A2A0L8
RM of Pipestone	<ul style="list-style-type: none"> <li>▪ Reduced tanker-truck traffic</li> <li>▪ Increase in local jobs and municipal taxes</li> <li>▪ Decreased highway maintenance costs</li> </ul>	21 June 2011	A1Z8X6

### **6.3 Comments Received by the NEB on its EA Documentation**

#### **6.3.1 Comments on the Draft Scope of the EA**

The only comments received on the draft scope of the EA came from OMFN and SFN. Both OMFN and SFN have since indicated that they support the Project application and have requested that their evidence be withdrawn from the record of proceeding.

#### **6.3.2 Comments on the Draft ESR**

Following the release of the draft ESR, comments were received from EC, TC, MDWS, TFCC, Manitoba Infrastructure and Transportation (MIT) and Enbridge Bakken. To view the submitted comments, please visit the following hyperlink: <https://www.neb-one.gc.ca/l1-eng/livelihood.exe?func=ll&objId=661686&objAction=browse&sort=-name>.

Appendix 2 provides a summary of the comments received, some of which resulted in wording changes to the ESR. Explanations have been included for those comments that did not result in changes to the ESR.

In addition to the changes made in the ESR as a result of comments received, the Board has also made various minor wording changes throughout to increase clarity and readability of the document.

### **7.0 THE NEB'S EA METHODOLOGY**

In assessing the environmental effects of the Project, the NEB used an issue-based approach. As described in Subsection 8.2, the NEB identified interactions expected to occur between the proposed project activities and the surrounding environmental elements. Also included were the consideration of potential accidents and malfunctions that may occur due to the Project and any change to the Project that may be caused by the environment. If there were no expected element/project interactions, then no further examination was deemed necessary. Similarly, no further examination was deemed necessary for interactions that would result in positive or neutral potential effects. In circumstances where the potential effect was unknown, it was categorized as a potential adverse environmental effect.

Subsection 8.3.1 provides a summary of standard or routine design and practices that Enbridge Bakken would rely on to mitigate the majority of the Project's potential adverse environmental effects.

Subsection 8.3.2 provides a more detailed analysis of individual potential adverse environmental effects selected based on public concern, the use of non-standard design or mitigation, the relative importance of the elements in question in the context of Enbridge Bakken's application or Board-proposed conditions addressing specific environmental effects. Each analysis in this subsection specifies mitigation measures, significance criteria ratings (as defined in Table 4 below), monitoring commitments and the Board's corresponding views, including any proposed issue-specific conditions.

Subsection 8.4 addresses cumulative effects, Subsection 8.5 addresses follow-up programs and Subsection 8.6 lists all Proposed Conditions for any subsequent regulatory approvals for the Project.

**Table 4: Evaluation of Significance Criteria**

<b>Evaluation of Significance Criteria Definitions</b>		
<b>Criteria</b>	<b>Rating</b>	<b>Definition</b>
All criteria	Uncertain	When no other criteria rating descriptor is applicable due to either lack of information or inability to predict.
Frequency	Single	One time event within any phase of the Project lifecycle.
	Multiple	Multiple occurrences during any phase of the Project lifecycle.
	Continuous	Continuous through any phase of the Project lifecycle.
Duration	Short-term	Adverse environmental effect duration is in the order of months and/or limited to the proposed construction.
	Medium-term	Adverse environmental effect duration is in the order of a few years.
	Long-term	Adverse environmental effect would remain evident throughout the planned operation of the pipeline or beyond the lifecycle of the Project.
Reversibility	Reversible	Adverse environmental effect expected to return to baseline conditions within the life of the Project.
	Possible	Adverse environmental effect may or may not return to baseline conditions within the life of the Project.
	Irreversible	Adverse environmental effect would be permanent, or reversible beyond the lifecycle of the Project.
Geographic Extent	Project Development Area (PDA)	30 m permanent construction RoW and temporary workspace footprints associated with constructing the Bakken Pipeline, access roads and associated facilities (e.g., Bakken Pump Station, above-ground block valve sites).
	Local Study Area (LSA)	Includes the PDA as well as a 1 km buffer on either side of the RoW, and a 1.5 km buffer around the Bakken Pump Station.
	Regional Study Area (RSA)	Four largest communities in the area (Estevan, Oxbow, Redvers, Virden) and locations of regional past, present and future projects and activities that have the potential to interact cumulatively with the Project. For greenhouse gas-related effects analysis, the study area comprises the SK and MB boundaries.
Magnitude	Low	Adverse environmental effect would have a negligible influence on physical (e.g., soils and terrain), biophysical (e.g., vegetation, wildlife, fisheries, air quality) or social elements (e.g., human health, TLU, heritage resources, ambient noise levels). Effect would impact quality of life for some, but individuals commonly adapt or become habituated, and the effect is widely accepted by society.
	Moderate	Adverse environmental effect would have a local influence on physical, biophysical, or social elements. Effect would impact quality of life but the effects is normally accepted by society.
	High	Adverse environmental effect would have a regional influence on physical, biophysical, or social elements. Effect would impact quality of life, result in lasting stress and is generally not accepted by society except under extenuating circumstance.
Evaluation of Significance	Likely to be significant	Effects that are of high frequency, irreversible, long term duration, regional extent and of high magnitude.
	Not likely to be significant	Any adverse effect that does not meet the above criteria for “likely to be significant”.



## **8.0 ENVIRONMENTAL EFFECTS ANALYSIS**

### **8.1 Routing of the Bakken Pipeline**

Enbridge Bakken states that the Project was designed to minimize the environmental footprint by constructing the majority of the Bakken Pipeline alongside and contiguous to an existing Enbridge Westspur RoW, utility corridors and facilities. The lands along the proposed route are 98.5% privately held with the remaining 1.5% being Crown land. In determining the scope for the Project, Enbridge Bakken examined two pipeline route alternatives.

Alternative 1 included approximately 224 km of new 323.9 mm (12-inch) pipe, approximately 97 km of which would have been in Canada. This route would have paralleled the existing EPI North Dakota System from Berthold, ND to Minot, ND, and from Minot to Sherwood, ND, but would have required entirely new non-contiguous RoW from Sherwood to Cromer, MB. Four new booster pump stations would also have been required, along with new tankage at Berthold and custody transfer metering at Cromer.

Alternative 2, located entirely within the US, included approximately 497 km of new 323.9 mm (12-inch) pipe that would have paralleled EPI's North Dakota System from Berthold to Clearbrook, Minnesota. The pipeline would have tied into the EPI Mainline at Clearbrook. Seven booster stations would also have been required, along with new tankage at Berthold and custody transfer metering at Clearbrook.

Enbridge Bakken assembled a multi-disciplinary team that reviewed the preliminary route options. The team considered the following routing criteria: contiguous RoW, environmental impact, existing infrastructure, construction time frame, future system expansion, costs and external and internal stakeholder participation.

In both cases, the Bakken Pipeline, as proposed by Enbridge Bakken, was concluded to be the preferred route. Alternative 1 was rejected by Enbridge Bakken due to the requirement for 97 km of non-contiguous RoW in MB, its higher cost and the necessity to obtain a Presidential Permit which was expected to delay the in-service date by at least 12 months. Enbridge Bakken also rejected Alternative 2 due to significantly higher capital costs.

If the Project is approved, further deviations, changes or alterations to the applied-for route would require an application to the NEB.

## 8.2 Project - Environment Interactions

**Table 5: Project-Environment Interactions**

	Environmental Element	Project Interaction? Y/N/U	Description of Interaction (How, When, Where)	Type of Potential Effect P/Ntl/Adv	Potential Adverse Environmental Effect	Mitigation Discussed in Subsection:
Bio-Physical	Physical Environment (Terrain Stability)	Y	<ul style="list-style-type: none"> <li>Clearing, grading, excavation and backfilling at watercourse crossings</li> </ul>	Adv	<ul style="list-style-type: none"> <li>Terrain instability</li> </ul>	8.3.1
	Soil and Soil Productivity	Y	<ul style="list-style-type: none"> <li>Clearing, stripping, grading, excavation and backfilling along the RoW</li> <li>Construction in wet conditions</li> <li>Exposure of soil stockpiles to the elements</li> <li>Use of construction equipment and vehicles</li> <li>Discovery of historical contamination</li> </ul>	Adv	<ul style="list-style-type: none"> <li>Spread of historical contamination</li> <li>Lowering of soil productivity on agricultural land through:                             <ul style="list-style-type: none"> <li>topsoil/subsoil admixing (both in general and involving saline or high gravel content subsoil)</li> <li>compaction and rutting</li> <li>surface wind and water erosion</li> <li>trench subsidence</li> </ul> </li> </ul>	8.3.2.1
	Vegetation	Y	<ul style="list-style-type: none"> <li>Clearing, stripping, construction and operation activities along the RoW</li> <li>Use of construction equipment and vehicles, both on and off the RoW</li> <li>Maintenance of the RoW during operations</li> </ul>	Adv	<ul style="list-style-type: none"> <li>Alteration of vegetation important to wildlife</li> <li>Loss of riparian habitat</li> </ul>	8.3.1
					<ul style="list-style-type: none"> <li>Non-native or invasive weed introduction and spread</li> <li>Loss or alteration of native vegetation, rare ecological communities and rare plants</li> </ul>	8.3.2.2
	Water Quality and Quantity	Y	<ul style="list-style-type: none"> <li>Clearing, stripping, grading, excavation and backfilling along the RoW</li> <li>Use of construction equipment and vehicles near or in watercourses</li> <li>Construction of trenched watercourse crossings</li> <li>Hydrostatic test water withdrawal and discharge</li> </ul>	Adv	<ul style="list-style-type: none"> <li>Alteration of natural drainage patterns</li> <li>Disruption of streamflow</li> <li>Disruption of springs</li> <li>Sedimentation of watercourses</li> </ul>	8.3.1
					<ul style="list-style-type: none"> <li>Reduction of groundwater quality</li> <li>Reduction of surface water quality</li> </ul>	8.3.2.3

	Environmental Element	Project Interaction? Y/N/U	Description of Interaction (How, When, Where)	Type of Potential Effect P/Ntl/Adv	Potential Adverse Environmental Effect	Mitigation Discussed in Subsection:
	Fish and Fish Habitat	Y	<ul style="list-style-type: none"> <li>Clearing, stripping, grading, excavation and backfilling along the RoW</li> <li>Use of construction equipment and vehicles near or in watercourses</li> <li>Hydrostatic test water withdrawal and discharge</li> <li>Inadvertent release of drilling mud during trenchless crossings</li> </ul>	Adv	<ul style="list-style-type: none"> <li>Harmful alteration, disruption or destruction of fish habitat (including riparian areas)</li> <li>Health effects (including death) on fish caused by increased suspended sediment concentrations</li> <li>Blockage of fish movements</li> </ul>	8.3.1
	Wetlands	Y	<ul style="list-style-type: none"> <li>Clearing, grading, excavation and backfilling in and around wetlands</li> <li>Use of construction equipment and vehicles</li> <li>Permanent establishment of the Bakken Pump Station and access road</li> </ul>	Adv	<ul style="list-style-type: none"> <li>Alteration of wetlands (hydrologic and water quality functions)</li> <li>Loss of rare plants and wildlife habitat in wetlands</li> </ul>	8.3.2.4
	Wildlife and Wildlife Habitat	Y	<ul style="list-style-type: none"> <li>Clearing, grading, excavation and backfilling along the RoW</li> <li>Ongoing operation of the Bakken Pump Station</li> <li>Use of construction equipment and vehicles</li> </ul>	Adv	<ul style="list-style-type: none"> <li>Loss or alteration of habitat</li> <li>Sensory disturbance during construction</li> <li>Longer-term displacement of wildlife in the vicinity of the Bakken Pump Station</li> <li>Wildlife mortality</li> <li>Barriers to wildlife movement during construction</li> </ul>	8.3.1
	Wildlife Species at Risk (federally-listed on Schedule 1 of the SARA)	Y	<ul style="list-style-type: none"> <li>Clearing, grading, excavation and backfilling along the RoW</li> <li>Use of construction equipment and vehicles</li> </ul>	Adv	<ul style="list-style-type: none"> <li>Species at risk mortality and sensory disturbance during construction</li> <li>Alteration of species at risk habitat</li> </ul>	8.3.2.5
	Species of Special Status	Y	<ul style="list-style-type: none"> <li>Clearing, grading, excavation and backfilling along the RoW</li> <li>Use of construction equipment and vehicles</li> </ul>	Adv	<ul style="list-style-type: none"> <li>Migratory bird mortality and sensory disturbance during construction</li> <li>Alteration of migratory bird habitat</li> </ul>	8.3.2.6
	Air Quality	Y	<ul style="list-style-type: none"> <li>Use of construction equipment and vehicles</li> <li>Burning of slash material</li> <li>Pipeline operation and maintenance activities</li> </ul>	Adv	<ul style="list-style-type: none"> <li>Increase in greenhouse gas and air emissions</li> <li>Increase in dust and smoke during construction</li> </ul>	8.3.1



	Environmental Element	Project Interaction? Y/N/U	Description of Interaction (How, When, Where)	Type of Potential Effect P/Nt/Adv	Potential Adverse Environmental Effect	Mitigation Discussed in Subsection:
Socio-Economic	Human Occupancy/ Resource Use	Y	<ul style="list-style-type: none"> <li>▪ Increase in vehicular traffic (workforce and materials transportation)</li> <li>▪ Clearing, grading, excavation and backfilling activities along the RoW</li> <li>▪ Construction of trenched watercourse crossings</li> <li>▪ Construction of temporary and permanent roads and bridges</li> <li>▪ Hydrostatic water withdrawal and discharge</li> </ul>	Adv	<ul style="list-style-type: none"> <li>▪ Disruption of water well use</li> <li>▪ Interference with navigation of waterways and impacts to navigation safety</li> </ul>	8.3.1
	Heritage Resources	Y	<ul style="list-style-type: none"> <li>▪ Clearing, grading and excavation activities along the RoW</li> </ul>	Adv	<ul style="list-style-type: none"> <li>▪ Disturbance or destruction of previously-unknown heritage, archaeological and paleontological resources</li> <li>▪ Disturbance or loss of identified heritage resources</li> </ul>	8.3.1
	Traditional Aboriginal Land and Resource Use	Y	<ul style="list-style-type: none"> <li>▪ Clearing, grading, excavation and backfilling activities along the RoW</li> <li>▪ Removal of native vegetation</li> <li>▪ Construction of temporary and permanent roads</li> <li>▪ Operation and maintenance activities</li> <li>▪ Construction of trenched watercourse crossings</li> </ul>	Adv	<ul style="list-style-type: none"> <li>▪ Interference with navigation of waterways and impact to navigation safety</li> </ul>	8.3.1
					<ul style="list-style-type: none"> <li>▪ Loss or alteration of Aboriginal TLU sites (e.g., habitation sites, gathering sites, sacred sites)</li> <li>▪ Disruption of, or inability to carry out, traditional activities</li> </ul>	8.3.2.7
	Socio and Cultural Well-Being Infrastructure and Services	Y	<ul style="list-style-type: none"> <li>▪ Use of local water, recreational and waste management resources</li> <li>▪ Increase in vehicular traffic during construction</li> <li>▪ Increase in workforce and transient workers during construction</li> <li>▪ Use of construction vehicles and equipment</li> </ul>	Adv	<ul style="list-style-type: none"> <li>▪ Temporary alteration of community life during construction</li> <li>▪ Temporary increase and disruption of traffic movement on highways and local roads</li> <li>▪ Temporary increase in waste flow to regional landfill sites during construction</li> <li>▪ Change in availability of commercial accommodation during construction</li> <li>▪ Temporary change in capacity of existing emergency and protective services</li> </ul>	8.3.1

	Environmental Element	Project Interaction? Y/N/U	Description of Interaction (How, When, Where)	Type of Potential Effect P/Ntl/Adv	Potential Adverse Environmental Effect	Mitigation Discussed in Subsection:
	Human Health/Aesthetics	Y	<ul style="list-style-type: none"> <li>Noise and air emissions during construction</li> <li>Use of construction vehicles and equipment</li> <li>Operations and maintenance activities</li> </ul>	Adv	<ul style="list-style-type: none"> <li>Health effects on local residents due to decreased air quality</li> <li>Health effects on local residents associated with impacts to groundwater wells</li> <li>Health effects on local residents from changes to the acoustic environment as a result of pump station operation</li> <li>Alteration of viewscape</li> </ul>	8.3.1
Other	Accidents/Malfunctions	Y	<ul style="list-style-type: none"> <li>Pipeline rupture</li> <li>Fire</li> <li>Release of drilling mud during trenchless crossings</li> <li>Damage to third party infrastructure during crossings, including breaks</li> <li>Spills of hazardous materials during construction</li> <li>Transportation accidents</li> </ul>	Adv	<ul style="list-style-type: none"> <li>Wildfires</li> <li>Health effects (including death) on humans and wildlife</li> <li>Contamination of soil, surface water and/or groundwater and associated effects on: <ul style="list-style-type: none"> <li>Soil productivity</li> <li>Fish and fish habitat</li> <li>Wetland function</li> <li>Plants and ecological communities</li> <li>Agricultural activities and livestock</li> <li>Human occupancy</li> </ul> </li> </ul>	8.3.1
	Effects of the Environment on the Project	Y	<ul style="list-style-type: none"> <li>Flooding</li> <li>Over-pipe erosion</li> <li>Frost heave and/or terrain shift</li> <li>Wildfire</li> <li>Climate change</li> </ul>	Adv	<ul style="list-style-type: none"> <li>Loss of cover over the pipeline</li> <li>Disruption of construction activities</li> <li>Damage to infrastructure causing contamination of soil, surface water and/or groundwater</li> <li>Effects on scheduling of maintenance activities</li> </ul>	8.3.1

### **8.3 Analysis of Potential Adverse Environmental Effects**

Several mitigation strategies have been proposed by Enbridge Bakken to avoid or minimize the potential effects of the Project including: avoidance through route selection, scheduling of activities to avoid sensitive periods, developing mitigation measures to address site-specific and general issues, implementing HDD (where feasible) and following DFO *Operational Statements* to cross watercourses.

Enbridge Bakken's proposed measures and mitigative strategies have provided the Board with a sufficient basis to assess the potential adverse environmental effects and evaluate whether those effects can be effectively mitigated.

As noted in Section 7.0 of this ESR, the analysis of potential adverse effects has been categorized into two streams: Subsection 8.3.1 – "Analysis of Potential Adverse Environmental Effects to be Mitigated Using Standard Measures", and Subsection 8.3.2 – "Detailed Analysis of Potential Adverse Environmental Effects". Note that specific 'Views of the Board' are provided for each of the environmental effects discussed in Subsection 8.3.2, whereas the Views presented in Subsection 8.3.1 encompass the remaining potential adverse environmental effects identified in Subsection 8.2. Both subsections identify Proposed Conditions for any authorizations in the event that the NEB grants regulatory approval for the Project.

Enbridge Bakken has committed to conducting post-construction monitoring (PCM) to evaluate the reclamation of disturbed areas, assess the status of outstanding issues, identify any new issues, recommend remedial measures and document PCM results and post-construction remedial measures. Enbridge Bakken has proposed that the PCM occur at one and two years after construction for soils, vegetation and watercourse crossings; two and five years after construction for wetlands; and one year post-construction for noise. With respect to the proposed two-year PCM timeframe, the Board is uncertain about the achievability of reclamation success determinations within this period due to the variability in the natural environment. The Board recommends an extended duration (five years) for formal PCM, which is described in more detail in Proposed Condition B.10 of Subsection 8.6.

#### **8.3.1 Analysis of Potential Adverse Environmental Effects to be Mitigated Using Standard Measures**

A standard mitigative measure is a specification or practice that has been developed by industry, or prescribed by a government agency, that has been previously employed successfully, and meets the expectations of the NEB.

Enbridge Bakken has proposed a variety of standard mitigation measures to address the majority of the identified potential adverse environmental and socio-economic effects of the Project, as described in Table 5 (see the last column to identify effects considered in this section). These measures are presented in Enbridge Bakken's ESA, Environmental Protection Plans (EPPs) and subsequent submissions for the Project.

The Board recommends that, in any authorizations that it may grant, conditions be included requiring Enbridge Bakken to file updated EPPs for approval (in advance of construction) and to maintain a commitments tracking table. The intent of these conditions is to ensure that all



mitigation measures proposed by Enbridge Bakken in its application and supplementary filings, as well as its commitments made during the oral public hearing, are tracked, organized, appropriate and available to those field staff responsible for constructing the Project. See Proposed Conditions A.1, A.2, B.1 and B.2 in Subsection 8.6 for more detailed wording of these conditions.

Enbridge Bakken obtained an Archaeological Research Investigation Permit (Permit 10-121) from SK Tourism, Parks, Culture and Sport – Heritage Conservation Branch (SHCB) and conducted a HRIA for the Project from 9-14 June 2010 (details discussed in Section 5.0). Enbridge Bakken has committed to submitting its HRIA to SHCB and obtaining the necessary letters of clearance for the Project. In order to ensure that Enbridge Bakken has acquired all necessary archaeological and heritage resources permits and clearances in advance of construction, the Board recommends that, in any authorization granted, a condition be included requiring the company to file its letters of clearance from the SHCB and MB Culture, Heritage and Tourism. See Proposed Condition B.8 in Subsection 8.6 for more detailed wording of this condition.

The NEB is of the view that, for this Project, if Enbridge Bakken follows the standard design or mitigative measures including in its filings, its commitments made during the oral public hearing and adheres to the Proposed Conditions found in Subsection 8.6, the potential adverse environmental effects considered in this section are not likely to be significant.

### 8.3.2 Detailed Analysis of Potential Adverse Environmental Effects

As noted in Section 7.0, this subsection provides a more detailed analysis of certain effects that were the subject of public concern, involve the use of non-standard design or mitigation measures, have resulted in Board-proposed effect-specific conditions, or for which the Board has identified a relative importance in the context of this application. Definitions for the Evaluation of Significance Criteria used in the following tables can be found in Table 4 (Section 7.0).

#### 8.3.2.1 Soil and Soil Productivity

<b>Potential Effect(s)</b>	<ul style="list-style-type: none"> <li>▪ Lowering of soil productivity on agricultural land</li> <li>▪ Spread of historical contamination</li> </ul>
<b>Details</b>	The Project has the potential to adversely affect soil and soil productivity through admixing of topsoil and subsoil (including saline and high gravel content subsoils), causing trench instability, trench subsidence or the creation of a trench crown. The Board also notes that 150 product release sites (including salt water, oil, emulsion and natural gas) were recorded within 1 km of the SK portion of the proposed route between 1991 and 2009. Encountering contamination during construction could lead to the spread of that contamination.
<b>Mitigation Measures</b>	<p>Within areas where upper subsoils were identified as having high salt concentrations, Enbridge Bakken has committed to using alternative soil handling techniques. These include three-lift soil salvage, modified two-lift soil salvage, over-stripping and distinct separation of saline subsoil from topsoil. Enbridge Bakken has also committed to using the above alternative soil handling techniques to mitigate soil admixing in areas with high gravel content subsoils.</p> <p>Enbridge Bakken has developed and committed to implementing the following contingency plans in order to protect soils from admixing effects during salvage operations:</p>

	<ul style="list-style-type: none"><li>▪ Soil Handling Contingency Plan;</li><li>▪ Soil Erosion Contingency Plan;</li><li>▪ Soil/Sod Pulverization Contingency Plan;</li><li>▪ Wet/Thawed Soil Contingency Plan; and</li><li>▪ Frozen Contingency.</li></ul> <p>Enbridge Bakken also has in place a Contaminated Soil Identification and Temporary Storage Plan which it would implement should historical contamination be discovered during construction.</p> <p>With respect to the potential for soil subsidence or crown creation along the trench, Enbridge Bakken has estimated that 90% of spoil can be returned to the trench by compaction with heavy equipment. Enbridge Bakken has proposed specific remedial measures to mitigate areas on the RoW where a sunken trench is evident.</p>				
Monitoring	<p>During the PCM program, soil monitoring would occur at sites along the RoW identified as having issues and where reclamation problems are identified through landowner consultation, operation and maintenance reports, or aerial and ground reconnaissance. The criteria for soil quality would include visual observations of surface soil condition and quality/quantity of vegetation on the RoW as compared to adjacent, undisturbed lands. The criteria for landscape capability would include ease of travel for farm equipment, site drainage, evidence of subsidence or tension cracks and surface stone/rock content.</p> <p>Where issues are identified through this assessment, Enbridge Bakken submits that it would make every effort to implement mitigative measures as soon as is feasible. Issues that cannot be mitigated immediately would be documented for mitigation and follow-up monitoring as soon as conditions allow.</p>				
Views of the NEB	<p>The Board notes Enbridge Bakken’s commitment to implementing a Contaminated Soil Identification and Temporary Storage Plan, should historical contamination be discovered during construction. The Board recognizes Enbridge Bakken’s commitment to mitigating soil productivity concerns, as outlined in measures described in its application and subsequent filings, its EPPs, and soil monitoring during PCM. As discussed in Subsection 8.3, the Board recommends that Enbridge Bakken extend its formal PCM program from two to five years following construction and that the PCM reports be filed with the Board. The Board expects these filings to include an assessment of observed soils-related issues. See Proposed Condition B.10 in Subsection 8.6 for more details.</p>				
Evaluation of Significance	Frequency	Duration	Reversibility	Geographical Extent	Magnitude
	Multiple	Short-term to Medium-term	Reversible	PDA	Moderate
	Adverse Effect				
	Not likely to cause significant adverse environmental effects.				

### 8.3.2.2 Vegetation

<b>Potential Effect(s)</b>	<ul style="list-style-type: none"> <li>▪ Loss or alteration of native vegetation, rare ecological communities and rare plants</li> <li>▪ Non-native or invasive weed introduction and spread</li> </ul>
<b>Details</b>	<p>Native vegetation and rare plants may be adversely affected during construction, operation and maintenance of the proposed Project. Non-native and invasive weeds have the potential to become established, competing with both native vegetation and agricultural crops, thus disrupting revegetation efforts.</p> <p>The Board requested further information regarding mitigation plans for the protection of three SK CDC-listed rare plant species identified along the Bakken Pipeline route. With respect to rare plant survey methodology, EC expressed concerns about the area within which Enbridge Bakken</p>



	<p>conducted the surveys (35 m on either side of the RoW). EC recommended a survey area of 300 m from any disturbance in areas where SARA or COSEWIC-listed plants may be present. EC noted that buffalograss (a SARA Schedule 1-listed species) may be present in the Project area and recommended that no construction or a 300m setback buffer be observed.</p> <p>MDWS expressed concerns with respect to riparian area vegetation, recommending that Enbridge Bakken maintain a 30 m wide undisturbed native vegetation area for lands located adjacent to surface waters.</p> <p>Weed control and management concerns were noted by the Board because of the high number of noxious weed species observed during field surveys along the proposed RoW. During the oral hearing, the Board requested more information regarding Enbridge Bakken's plans to manage weeds during and after construction.</p>
<b>Mitigation Measures</b>	<p>Enbridge Bakken has committed to the following:</p> <ul style="list-style-type: none"> <li>▪ implementing a Vegetation Species of Concern Discovery Contingency Plan;</li> <li>▪ salvaging and transplanting shrubs and rare plants except those listed on Schedule 1 of the SARA, using a Live Plant Salvage and Transplant Plan;</li> <li>▪ developing site-specific mitigation plans for rare plants found during field surveys;</li> <li>▪ re-establishing native vegetation along disturbed areas of the proposed RoW by seeding disturbed non-wetland areas with native species and planting live willow cuttings where required for stream bank stability;</li> <li>▪ allowing natural regeneration to occur in wetlands and riparian areas where no erosion potential exists;</li> <li>▪ implementing a Vegetation Management Plan;</li> <li>▪ conducting a pre-construction weed survey and incorporating the results into an updated pipeline EPP and its Vegetation Management Plan;</li> <li>▪ cleaning all construction equipment prior to its arrival at work sites and limiting the number of passes through weed-infested areas;</li> <li>▪ cleaning equipment involved in clearing or topsoil stripping and handling activities in locations identified as having noxious weed infestations prior to moving to the next land parcel; and</li> <li>▪ monitoring topsoil piles for weed growth and applying treatments as required.</li> </ul>
<b>Monitoring</b>	<p>Enbridge Bakken's PCM program would determine the status of unresolved vegetation issues including poor vegetation establishment and weed growth. The criteria for successful reclamation would include: vegetation species composition, percent cover, density and plant height. If monitoring reveals restoration issues, Enbridge Bakken's Environmental Monitors would alert its Environmental Inspectors and work with them to develop corrective actions.</p>
<b>Views of the NEB</b>	<p>The Board acknowledges Enbridge Bakken's proposed Project-specific mitigation measures for weeds and rare plants outlined in its application and subsequent filings, and the above-noted commitments. However, the Board notes that its EPP for pipeline construction does not include a Project-specific weed management plan. The Board further notes the abundance of existing noxious weeds along the RoW, and that much of the land along the route is used for agriculture and prone to further weed infestation. Therefore, the Board is of the view that a plan focused on minimizing these effects along the RoW is required. Should the Project be approved, the Board recommends that Enbridge Bakken be required to complete and file a detailed Weed Management Plan (see Proposed Condition B.7 in Subsection 8.6).</p> <p>The Board acknowledges the concerns expressed by EC regarding the potential occurrence of buffalograss in the Project area. The Board notes Enbridge Bakken's commitment to implement appropriate mitigation measures as outlined in its Vegetation Species of Concern Discovery Contingency Plan of the draft pipeline EPP. In the event that buffalograss, or any other SARA Schedule 1-listed rare plant species, are observed within 300 m of the RoW during pre-construction surveys, the Board directs Enbridge Bakken to consult with EC in order to</p>



	determine appropriate mitigation measures. As discussed in Subsection 8.3, the Board also recommends that Enbridge Bakken extend its formal PCM program from two to five years following construction and that the PCM reports be filed with the Board. The Board expects these filings to include an assessment of vegetation-related issues. See Proposed Condition B.10 in Subsection 8.6 for more details.				
<b>Evaluation of Significance</b>	<b>Frequency</b>	<b>Duration</b>	<b>Reversibility</b>	<b>Geographical Extent</b>	<b>Magnitude</b>
	Single	Short to Long-Term	Reversible	PDA	Low to moderate
	<b>Adverse Effect</b> Not likely to cause significant adverse environmental effects.				

### 8.3.2.3 Water Quality and Quantity

<b>Potential Effect(s)</b>	<ul style="list-style-type: none"> <li>Reduction in surface water quality</li> <li>Reduction in groundwater quality</li> </ul>
<b>Details</b>	<p>Water quality and quantity could potentially be reduced as a result of Project operation (releases/spills), construction in wetlands and at watercourse crossings, and during hydrostatic test water withdrawal and discharge activities. In its letter of comment, MDWS highlighted water quality concerns associated with the construction of the Project, and included a list of recommendations and required MB permits and approvals with respect to water resource protection. With respect to water quality and quantity, MDWS recommendations to Enbridge Bakken included: commit to a habitat compensation agreement with MDWS, develop a PCM program, consult with MDWS prior to commencing watercourse crossings, establish riparian area protection buffers, and provide copies of the final EPP, watercourse crossings plan and PCM program details to MDWS.</p> <p>Several parties (including EC, MDWS, WBFN and TFCC) expressed concerns with respect to the protection of groundwater resources and emergency response procedures in the event of a pipeline release or facility spill. EC recommended that all Project-related spill contingency and emergency response plans adhere to Canadian Standards Association requirements and be submitted to regulatory agencies for review. MDWS included recommendations for inclusions in the Emergency Response Plan specific to the protection of aquifers, watercourses and the notification of potentially-impacted municipalities.</p> <p>Enbridge Bakken has proposed crossing Alameda Reservoir West, Alameda Reservoir East and Pipestone Creek using HDD methods. It has not proposed contingency crossing methods for these watercourses.</p>
<b>Mitigation Measures</b>	<p>Enbridge Bakken committed to implementing the following plans and procedures:</p> <ul style="list-style-type: none"> <li>Spill Contingency Plan;</li> <li>Flooding and Excessive Flow Plan;</li> <li>Soil Erosion Contingency Plan;</li> <li>Siltation of Watercourses Plan;</li> <li>Directional Drilling Procedures; and</li> <li>In-Stream Drilling Mud Release Contingency Plan.</li> </ul> <p>Enbridge Bakken committed to using the following spill prevention measures:</p> <ul style="list-style-type: none"> <li>supervisory control and data acquisition- (SCADA-) operated block valves in strategic locations along the Bakken Pipeline;</li> <li>adhering to engineering specifications and use of heavy wall pipe at road and railway crossings;</li> </ul>

	<ul style="list-style-type: none"><li>▪ regular and proactive pipeline monitoring and maintenance; and</li><li>▪ implementing EPI's spill prevention measures and procedures.</li></ul> <p>In the event of a spill, Enbridge Bakken would implement EPI's <i>Book 7: Emergency Response</i> of its <i>Operations and Maintenance Procedures Manual</i>, as well as a Spill Response Plan specific to the Project.</p>										
Monitoring	Enbridge Bakken's PCM program would assess watercourse crossings for bank restoration (revegetation, bank stability) and performance of run-off control structures, if present. If monitoring reveals restoration issues, Enbridge Bakken's Environmental Monitors would alert its Environmental Inspectors and work with them to develop corrective actions.										
Views of the NEB	The Board recognizes Enbridge Bakken's commitment to mitigation and spill prevention measures as outlined in its application and EPP and the development of a Project-specific Emergency Preparedness and Response Manual. In order to ensure that any changes to the proposed HDD crossings are properly consulted upon and that mitigation measures are updated, the Board recommends that, in any approval that may be granted, Enbridge Bakken must file, prior to undertaking the crossing(s), details of those changes, any updated mitigation and evidence of consultation with appropriate federal and provincial authorities. See Proposed Condition B.3 in Subsection 8.6 for more details.										
Evaluation of Significance	<table><tr><td>Frequency</td><td>Duration</td><td>Reversibility</td><td>Geographical Extent</td><td>Magnitude</td></tr><tr><td>Multiple</td><td>Medium-term</td><td>Possible</td><td>LSA</td><td>Moderate</td></tr></table> <p>Adverse Effect</p> <p>Not likely to cause significant adverse environmental effects.</p>	Frequency	Duration	Reversibility	Geographical Extent	Magnitude	Multiple	Medium-term	Possible	LSA	Moderate
Frequency	Duration	Reversibility	Geographical Extent	Magnitude							
Multiple	Medium-term	Possible	LSA	Moderate							

#### 8.3.2.4 Wetlands

<b>Potential Effect(s)</b>	<ul style="list-style-type: none"> <li>Alteration of wetlands (hydrologic and water quality functions)</li> <li>Loss of rare plants and wildlife habitat in wetlands</li> </ul>
<b>Details</b>	<p>Wetlands may be adversely affected during construction, operation and maintenance of the proposed Project. The Project has the potential to disrupt hydrologic and water quality function and cause the loss of rare plants and wildlife habitat.</p> <p>The Bakken Pipeline would affect 372 wetlands, most of which have been previously altered or disturbed by human activity. These wetlands serve as the primary locations of remnant native vegetation along the RoW and provide important wildlife habitat in the highly-fragmented Project area landscape.</p> <p>Two wetlands adjacent to the Bakken Pump Station would be impacted, including permanent alteration due to access road construction.</p> <p>EC and MDWS both recommended that Enbridge Bakken adopt a no-net-loss approach to wetland mitigation that complies with their respective wetland policies, including the restoration of degraded wetlands and the development of a compensation program that includes mutually agreed upon habitat restoration ratios.</p>
<b>Mitigation Measures</b>	<p>Enbridge Bakken committed to the following:</p> <ul style="list-style-type: none"> <li>conducting a pre-construction wetland survey for wetlands located on the Bakken Pipeline;</li> <li>scheduling construction to avoid high-water levels, flagging wetland boundaries, and minimizing disturbance to vegetation and soils;</li> <li>using wide-track equipment or conventional equipment operated from swamp mats when working on saturated soils during non frozen ground conditions to avoid compaction;</li> <li>restricting access through wetlands to the extent practical by installing a shoo-fly around wetlands or constructing a subsoil ramp if approved by appropriate regulatory authorities;</li> </ul>



	<ul style="list-style-type: none"> <li>removing all mats and ramps used to enable work and travel through wet areas and all bar ditch ramps from areas with mineral soils so that they do not impede the restoration of natural flow patterns;</li> <li>restricting grading adjacent to wetlands to the extent practical and avoiding grading within buffer of undisturbed vegetation adjacent to wetlands;</li> <li>if grading within wetland buffers is necessary, Enbridge Bakken would install temporary sediment barriers to prevent sediment from entering the wetland;</li> <li>no dewatering of wetlands (e.g., the installation of the permanent road at the Bakken Pump Station) unless approved by the provincial regulator;</li> <li>directing grading away from wetlands;</li> <li>allowing for natural vegetation recovery and using willow staking along wetland perimeters;</li> <li>developing a Wetland Compensation Plan in conjunction with a conservation agency partner (e.g., Ducks Unlimited Canada) for the restoration of wetlands impacted by construction of the Bakken Pump Station and associated facilities; and</li> <li>implementing a Wetland Restoration/Compensation Plan that includes suitable compensation ratios, in consultation with appropriate federal and provincial government authorities, for all wetlands along the Bakken Pipeline where wetland function has not been fully restored by the close of the five-year PCM program.</li> </ul>				
<b>Monitoring</b>	<p>Enbridge Bakken proposed monitoring wetland recovery for up to five years after construction. If Enbridge Bakken's PCM program determines that wetland reclamation has not been effectively achieved, and there appears to be some loss of wetland habitat or function, then a wetland compensation program would be implemented in consultation with EC and provincial government authorities.</p>				
<b>Views of the NEB</b>	<p>The Board notes Enbridge Bakken's commitment to conduct a pre-construction wetland survey along the RoW. The Board also notes that the EPP does not include a description of wetland-specific crossing methods and mitigation measures. Therefore, the Board recommends that, as part of any approval granted, Enbridge Bakken be required to file the survey results and to implement adequate wetland mitigation measures during construction (see Proposed Conditions B.2c) and B.6 in Subsection 8.6).</p> <p>Given Enbridge Bakken's commitment to compensate for wetland loss at the proposed Bakken Pump Station, the Board also recommends that, as part of any approval granted, Enbridge Bakken include a wetland reclamation plan in the EPP and file a Wetland Compensation Plan developed in consultation with federal and provincial government authorities (see Proposed Conditions A.2b) and A.3 in Subsection 8.6).</p> <p>The Board acknowledges Enbridge Bakken's commitment to monitor wetlands during the PCM program. If the PCM program determines that wetland reclamation has not been effectively achieved, and there appears to be some loss of wetland habitat or function, Enbridge Bakken has indicated that compensation would be considered in consultation with federal and provincial government authorities. Therefore, in the event that reclamation is not achieved, the Board recommends that, as a condition of any approval granted to Enbridge Bakken, it be required to submit a Wetland Restoration/Compensation Plan developed in consultation with federal and provincial government authorities, including MDWS (see Proposed Condition B.11 in Subsection 8.6).</p>				
<b>Evaluation of Significance</b>	Frequency	Duration	Reversibility	Geographical Extent	Magnitude
	Multiple	Short to long-term	Possible	LSA	Moderate
	Adverse Effect				
	Not likely to cause significant adverse environmental effects.				



### 8.3.2.5 Wildlife Species at Risk (Federally-Listed on Schedule 1 of the SARA)

<b>Potential Effect(s)</b>	<ul style="list-style-type: none"> <li>Species at risk mortality and sensory disturbance during construction</li> <li>Alteration of species at risk habitat</li> </ul>
<b>Details</b>	<p>There are 15 SARA Schedule 1-listed wildlife species whose habitat occurs throughout the LSA. These species include 10 birds, two amphibians, one reptile and two arthropods primarily dependent on wetland and grassland habitats. Two of these species, Sprague's pipit (Threatened) and northern leopard frog (Special Concern) were observed at several locations along the pipeline route.</p> <p>In its application, Enbridge Bakken estimated that, during construction and operation of the Bakken Pipeline, 10.7% of the route containing suitable terrestrial wildlife habitat and 12.6% of the route containing wetland habitat will be altered or lost. Clearing along the route and workspace would temporarily reduce forage availability and nesting opportunities. Temporary wetland alteration could affect breeding and overwintering opportunities for amphibians and avian use.</p> <p>The Board and EC requested additional information regarding Enbridge Bakken's plans for the protection of SARA-listed species. In wetlands where northern leopard frogs over-winter or breed, EC recommended that a 400 m setback be maintained. In wetlands where northern leopard frog is present, EC recommended that pipeline construction be avoided. In areas with potential Sprague's pipit habitat, EC recommended that no habitat destruction activities occur between 15 April and 31 August.</p> <p>EC also expressed uncertainties about the potential effects of the Project on additional species, including plants, arthropods, and birds listed on Schedule 1 of the SARA but not discussed by Enbridge Bakken in its ESA. EC recommended that Enbridge Bakken adhere to species setbacks and the development of site-specific mitigation measures to be used in order to avoid or lessen those potential effects.</p>
<b>Mitigation Measures</b>	<p>Enbridge Bakken committed to the following:</p> <ul style="list-style-type: none"> <li>a Wildlife Species of Concern Discovery Contingency Plan;</li> <li>conducting pre-construction wildlife surveys and developing additional mitigation for species at risk, including northern leopard frog and Sprague's pipit, which it would include in an updated EPP prior to construction;</li> <li>northern leopard frog mitigation which includes, but is not limited to, isolating the trench using silt fence/curtains, relocating frogs trapped in the trench to nearby ponds, and avoidance;</li> <li>conducting pre-construction surveys and additional mitigation for Sprague's pipit and other species whose nesting season extends past the migratory bird restricted activity period (RAP), up to August 31;</li> <li>restoring pre-construction wetland profiles, shrubby vegetation along wetlands and riparian areas during reclamation activities; and</li> <li>pre-construction monitoring for other species at risk, including monarch butterfly and Dakota skipper within their suitable habitats.</li> </ul>
<b>Views of the NEB</b>	<p>The Board recognizes that the Project has the potential to disturb SARA-listed species. The Board notes Enbridge Bakken's mitigation measures which are outlined in its application, subsequent filings and EPP and its commitment to complete pre-construction wildlife surveys. However, given the SARA-listing status of Sprague's pipit, northern leopard frog and other species potentially occurring, the Board is of the view that additional mitigation measures developed in consultation with appropriate federal and provincial authorities are required. Therefore, the Board recommends that, if the Project is approved, Enbridge Bakken be required to file pre-construction survey methodologies and the survey results and mitigation plans for SARA-listed wildlife species (see Proposed Conditions B.4 and B.5 in Subsection 8.6).</p>

Evaluation of Significance	Frequency	Duration	Reversibility	Geographical Extent	Magnitude
	Single	Short to medium-term	Possible	LSA to RSA	Moderate
	Adverse Effect				
	Not likely to cause significant adverse environmental effects.				

### 8.3.2.6 Species of Special Status

Potential Effect(s)	<ul style="list-style-type: none"> <li>▪ Migratory bird mortality and sensory disturbance during construction</li> <li>▪ Alteration of migratory bird habitat</li> </ul>
Details	<p>The Project traverses two migratory bird habitat sub-regions and important duck breeding habitat areas. There are 15 federally- and provincially-listed bird species whose habitat occurs throughout the LSA. Two of these species, Baird's sparrow (listed as Endangered by MB CDC) and bobolink (listed as Threatened by COSEWIC) were observed at several locations along the pipeline route. Baird's sparrow prefers nesting in lightly or un-grazed grassland habitat whereas bobolink prefers hayfields. EC has noted that potential habitat for both species is present along the pipeline route.</p> <p>To protect migratory bird nesting habitat, EC recommended that Enbridge Bakken avoid all habitat destruction activities (e.g., construction, mowing, clearing, trenching, reclamation) between the period of 15 April to 31 July. Where bobolink and other COSEWIC-listed species may be nesting during August, EC recommended that the above listed period be extended until 31 August. In wetlands attractive to breeding migratory birds, EC recommended that the above-listed activities not occur between 1 April and 31 August.</p> <p>To minimize sensory disturbance, EC recommended that all vertical above-ground structures be painted to a color that blends in with the landscape during breeding season. In Enbridge Bakken's response to this recommendation, it stated that the above-ground structures would be brightly colored and visible since the structures would be located in active agricultural fields.</p>
Mitigation Measures	<p>Enbridge Bakken committed to the following:</p> <ul style="list-style-type: none"> <li>▪ avoiding clearing and construction activities during the nesting season for migratory birds, to the extent practical;</li> <li>▪ in the event that construction and/or clearing activities must occur within RAPs for migratory birds (15 April to 31 July), Enbridge Bakken would undertake a pre-construction avian survey to ensure that no nests are destroyed or disturbed by construction activities;</li> <li>▪ conducting nesting surveys using EC-approved methodologies, seven days prior to construction, within suitable habitat and wetlands for species at risk and COSEWIC-listed species whose nesting season extends past the RAP, up to 31 August; and</li> <li>▪ avoiding construction within 400 m of any confirmed sharp-tailed grouse leks during the 15 March to 15 May restricted activity period in SK.</li> </ul>
Views of the NEB	<p>The Board recognizes that there is potential for the Project to disturb birds protected by the <i>Migratory Birds Convention Act</i> and provincial legislation as well as other wildlife species of special status.</p> <p>The Board recognizes Enbridge Bakken's commitment to conducting pre-construction surveys in the event that construction and/or clearing activities must occur within the RAP. In order to verify appropriate protection of protected species' habitat and to confirm that sufficient consultation has taken place with EC and provincial government authorities regarding mitigation, the Board recommends that, in any authorization granted, Enbridge Bakken be required to file the results of any such pre-construction surveys, the resultant mitigation and evidence of consultation on that mitigation. See Proposed Conditions A.4 and B.9 in Subsection 8.6 for more details.</p>



<b>Evaluation of Significance</b>	Frequency	Duration	Reversibility	Geographical Extent	Magnitude
	Single	Short to long - term	Possible	LSA to RSA	Low to moderate
	Adverse Effect				
	Not likely to cause significant adverse environmental effects.				

### 8.3.2.7 Traditional Aboriginal Land and Resource Use

<b>Potential Effect(s)</b>	<ul style="list-style-type: none"> <li>Loss or alteration of Aboriginal TLU sites (e.g., habitation sites, gathering sites, sacred sites)</li> <li>Disruption of, or inability to carry out, traditional activities</li> </ul>
<b>Details</b>	<p>Various Aboriginal groups have raised concerns about mitigation measures when encountering previously-undiscovered artifacts, damage to identified artifacts, preservation of plants and wildlife, as well as local environmental impacts.</p> <p>CTKFN and WBFN stated that they continue to practice TLU in the vicinity of the Bakken Pipeline Project, including hunting, fishing and plant gathering for traditional and medicinal use. CTKFN also indicated that they practice trapping activities in the Project area.</p> <p>TFCC stated that its concerns pertain to how the Project infringes on its members' rights to hunt, trap, fish and gather medicinal and traditional plants for sustenance, commercial, social and ceremonial purposes. It also shared concerns on potential adverse impacts from future spills, construction, traffic and impacts on archeological and sacred sites, habitat fragmentation and cumulative environmental impacts.</p> <p>Enbridge Bakken anticipates that the impacts of the Project on TLU, if any, would be minimal due to the current land tenure and land use. Enbridge Bakken has provided evidence indicating that landowners are not aware of past or current TLU activities taking place on their privately-held land or Crown land traversed by the Project.</p>
<b>Mitigation Measures</b>	<p>Enbridge Bakken is willing to work with Aboriginal groups through ongoing dialogue and consultation, including consultation on the adequacy of mitigation measures to reduce or eliminate potential Project-specific impacts on traditional land and resource use activities.</p> <p>Enbridge Bakken also identified existing artifacts and commits to avoiding them by marking sites and adjusting trench lines. Enbridge Bakken committed to filing a Heritage Resources Contingency Plan to mitigate the potential effects associated with encountering undiscovered artifacts during construction.</p> <p>Enbridge Bakken believes that the standard mitigation measures outlined in its ESA, EPP and EPI's Environmental Guidelines for Construction would be effective in addressing potential adverse impacts of the Project, if any, on the resources used for traditional purposes or traditional land use activities.</p>
<b>Views of the NEB</b>	<p>The Board is of the view that, although there were general claims of traditional use in the Project vicinity, there was no specific evidence provided by Aboriginal groups about traditional land and resources use within the Project RoW. Even assuming that there are any impacts on traditional land and resource use, the Board is of the view that such impacts would be minimal. This is because the Project would involve a relatively brief period of construction, with the vast majority of the facilities being buried. Furthermore, potential impacts on traditional use, if any, can be effectively mitigated through Enbridge Bakken's ongoing consultation with affected Aboriginal groups, implementation of its standard mitigation measures and the Board's conditions of approval.</p> <p>With regard to concerns expressed about how the Project could impact undiscovered historical, archaeological, cultural and spiritual sites, the Board notes Enbridge Bakken's commitment to cease construction and contact the appropriate government department in the event that any heritage resources are encountered during construction. The Board expects Enbridge Bakken to implement its Heritage Resources Discovery Contingency Plan.</p>



Evaluation of Significance	Frequency	Duration	Reversibility	Geographical Extent	Magnitude
	Single to multiple	Short to medium-term	Reversible	PDA to RSA	Low to moderate
	Adverse Effect				
	Not likely to cause significant adverse environmental effects.				

#### 8.4 Cumulative Effects Assessment

The assessment of cumulative effects entails considering the impact of the residual effects associated with the Project in combination with the residual effects from other projects and activities that have been or will be carried out, within the appropriate temporal and spatial boundaries and ecological context.

A list of past, current and ongoing development activities and known proposed development activities was developed by Enbridge Bakken to allow for an assessment of the residual effects of the Project in combination with those from other projects or activities that have been or are likely to be undertaken. Past activities include agricultural activities, transportation activities (e.g., creation of roads and railways), oil and gas activities (e.g., pipeline and facility development), power generation and transmission, utilities (e.g., rural powerlines) and mining activities within the LSA. Other recently-approved and completed pipeline projects in the vicinity of the current Project include the following: Enbridge Westspur's reactivation and reversal of Line EX-02, Enbridge Pipelines (Saskatchewan) Inc.'s Phase II Expansion Project, Enbridge Westspur's Phase II Expansion Project, EPI's Alberta Clipper Expansion Project, Enbridge Southern Lights GP's Southern Lights Project and Enbridge Westspur's Alida to Cromer Capacity Expansion Project.

Current and future activities within the SK portion of the RSA include transportation infrastructure upgrades, municipal facility construction, oil and gas development and expansion of the Boundary Dam Mine and Power Station. No relevant future projects or activities were identified in MB. Residual effects from these activities could also interact with those of the Project.

Enbridge Bakken identified potential cumulative residual effects associated with the following elements:

- physical elements such as soil productivity, terrain, air quality and acoustic environment;
- biological elements such as fish and fish habitat, wetlands, vegetation, wildlife and wildlife habitat, and species at risk;
- socio-economic elements such as human occupancy and resource use, social and cultural well-being, human health, and infrastructure and services; and
- accidents and malfunctions.

Enbridge Bakken stated that, with the exception of air quality and acoustic environment, its proposed Project-specific environmental protection and mitigative measures are sufficient to adequately address potential cumulative effects. Enbridge Bakken also indicated that the

cumulative residual environmental and socio-economic effects associated with the construction and operation of the Project are not unlike those regularly encountered during routine pipeline and associated facility construction in similar settings.

Enbridge Bakken determined that potential residual air quality effects due to the Project included increases in local nuisance dust, noise and vehicle emissions during construction. These effects would act cumulatively with daily traffic and commercial activities (e.g., agriculture, oil and gas) occurring within the general Project area.

In order to reduce nuisance air emissions, traffic-related noise and other socio-economic effects related to traffic, Enbridge Bakken proposed various mitigation options. These include the use of buses to transport workers and liaising with local industry associations and RMs to optimize traffic routes and volumes during construction.

The NEB has considered the potential for cumulative environmental effects and determined that any adverse environmental effects that are likely to result from this Project in combination with other projects or activities that have been or will be carried out would be minor. Therefore, it is unlikely that there would be any significant cumulative environmental effects resulting from this Project.

## **8.5 Follow-Up Program**

The Project and its associated activities are generally routine in nature and the identified potential adverse environmental effects are expected to be similar to those of past projects of a similar nature in a similar environment. For these reasons, the NEB is of the view that a follow-up program under the CEA Act would not be appropriate for this Project.

The Board understands that other RAs (currently, TC is the lone other RA) may rely on the NEB's ESR to the extent possible in making their respective CEA Act determinations, but may produce an appendix to the ESR if necessary. Other RAs may require a follow-up program to ensure that mitigation measures related to their areas of responsibility, and any conditions attached to their respective licenses and approvals, are effectively implemented.

## **8.6 Proposed Conditions**

The Board proposes that, in any authorization(s) that it may grant, a condition be included requiring Enbridge Bakken to carry out all of the environmental protection and mitigation measures outlined in its application and subsequent submissions.

In addition, the Board also proposes that the following conditions form part of any NEB regulatory authorizations that may be granted for the construction and operation of facilities proposed as part of the Project. The Board notes that Enbridge Bakken has applied to construct and operate facilities under sections 58 and 52 of the NEB Act. In developing these Proposed Conditions, the NEB has considered the difference in proposed construction timeframes for the facilities applied for under each section. For the purposes of these Proposed Conditions the following terms are used:



- Section 58 Facilities** – refers to the proposed Bakken Pump Station near Steelman, SK, and proposed facilities at the existing EPI Cromer Terminal near Cromer, MB.
- Section 52 Facilities** – refers to the proposed Bakken Pipeline and associated above-ground block valve sites between the proposed Bakken Pump Station near Steelman, SK, and the existing EPI Cromer Terminal near Cromer, MB, as well as the proposed operation of existing Line EX-02.

In these conditions, the expression “commencing construction” means the clearing of vegetation, ground-breaking and other forms of RoW preparation that may have an impact on the environment, but does not include activities associated with normal surveying activities.

**A. Proposed Conditions for any Authorization Related to the Section 58 Facilities**

**A.1 Enbridge Bakken must:**

- a) file with the Board, at least 14 days prior to commencing construction, an updated Commitments Tracking Table;
- b) update the status of the commitments in a) on a monthly basis until completion of the Section 58 Facilities; and
- c) maintain at its construction office(s):
  - i) the relevant environmental portion of the Commitments Tracking Table listing all regulatory commitments, including but not limited to, those commitments resulting from Enbridge Bakken’s application and subsequent filings, and conditions from permits, authorizations and approvals;
  - ii) copies of any permits, approvals or authorizations for the Section 58 Facilities issued by federal, provincial or other permitting authorities, which include environmental conditions or site-specific mitigation or monitoring measures; and
  - iii) any subsequent variances to any permits, approvals or authorizations in ii).

**A.2** Enbridge Bakken must file with the Board for approval, at least 45 days prior to commencing construction, an updated Environmental Protection Plan (EPP), including an Environmental Plot Plan, for the Section 58 Facilities. This EPP must be a comprehensive compilation of all environmental protection procedures, mitigation measures, and monitoring commitments, as set out in Enbridge Bakken 's application for the Project, its subsequent filings, evidence collected during the hearing process, or as otherwise agreed to during questioning or in its related submissions during the OH-01-2011 proceeding. The EPP must subsequently be updated to include any additional measures arising from all outstanding pre-construction field studies. Construction cannot begin until the Board approves the final updated EPP.



The EPP must include, but not be limited to, the following elements:

- a) environmental procedures, including site-specific plans, criteria for implementation of these procedures, mitigation measures and monitoring applicable to the Section 58 Facilities and activities;
- b) a wetland reclamation plan which includes a description of the condition to which Enbridge Bakken intends to reclaim and maintain the wetlands once construction has been completed; and
- c) evidence of consultation with appropriate federal and provincial government authorities that indicates their views on the EPP.

A.3 Enbridge Bakken must file with the Board, at least 30 days prior to commencing construction, the wetland compensation plan and evidence demonstrating consultation with appropriate federal and provincial government authorities indicating their views on the methodology and results of the plan.

A.4 In the event of construction or clearing activities within restricted activity periods for non-migratory birds protected under federal and provincial jurisdiction and for migratory birds, Enbridge Bakken must retain a qualified avian biologist to carry out a pre-construction survey to identify any birds and active nests in areas immediately surrounding the site(s) and must file the following with the Board within 15 days following the commencement of these construction or clearing activities:

- a) the results of the survey;
- b) mitigation, including monitoring, developed in consultation with Environment Canada, the Canadian Wildlife Service and the appropriate provincial government authorities to protect any identified migratory and non-migratory birds and their nests;
- c) mitigation, including monitoring, developed in consultation with Environment Canada and the Canadian Wildlife Service to protect any identified *Species at Risk Act*- (SARA-) listed birds and their nests; and
- d) evidence to confirm that the appropriate federal and provincial government authorities were consulted on the proposed methodology for the survey, the results of the survey and the mitigation and monitoring to be used, and a description of any outstanding concerns they may have.

## **B. Proposed Conditions for any Authorization Related to the Section 52 Facilities**

B.1 Enbridge Bakken must:

- a) file with the Board, at least 14 days prior to commencing construction, an updated Commitments Tracking Table;

- b) update the status of the commitments in a) on a monthly basis until completion of the Section 52 Facilities; and
- c) maintain at its construction office(s):
  - i) the relevant environmental portion of the Commitments Tracking Table listing all regulatory commitments, including but not limited to, those commitments resulting from Enbridge Bakken's application and subsequent filings, and conditions from permits, authorizations and approvals;
  - ii) copies of any permits, approvals or authorizations for the Section 52 Facilities issued by federal, provincial or other permitting authorities, which include environmental conditions or site-specific mitigation or monitoring measures; and
  - iii) any subsequent variances to any permits, approvals or authorizations in ii).

B.2 Enbridge Bakken must file with the Board for approval, at least 45 days prior to commencing construction, an updated Environmental Protection Plan (EPP), including Environmental Alignment Sheets, for the Section 52 Facilities. This EPP must be a comprehensive compilation of all environmental protection procedures, mitigation measures, and monitoring commitments, as set out in Enbridge Bakken's application for the Project, its subsequent filings, evidence collected during the hearing process, or as otherwise agreed to during questioning or in its related submissions during the OH-01-2011 proceeding. The EPP and Environmental Alignment Sheets must subsequently be updated to include any additional measures arising from all outstanding pre-construction filed studies. Construction cannot begin until the Board approves the final updated EPP.

The EPP must include, but not be limited to, the following elements:

- a) environmental procedures, including site-specific plans, criteria for implementation of these procedures, mitigation measures and monitoring applicable to all Section 52 Facilities and activities;
- b) a reclamation plan which includes a description of the condition to which Enbridge Bakken intends to reclaim and maintain the right-of-way once construction has been completed, and a description of measurable goals for reclamation;
- c) a wetland mitigation plan which includes the criteria used, and the rationale for selecting those criteria, in determining the crossing methods and mitigation measures to be employed; and
- d) evidence of consultation with appropriate federal and provincial government authorities indicating their views on the EPP, including information provided in c).

Any filings pertaining to this condition must also be submitted to appropriate federal and provincial authorities (including Manitoba Department of Water Stewardship [MWDS]), unless those authorities have specifically asked not to receive such filings.

**B.3 Enbridge Bakken must file with the Board either:**

- a) upon successful completion of the horizontal directionally drilled (HDD) watercourse crossings for Alameda Reservoir West, Alameda Reservoir East and Pipestone Creek, confirmation of their completion; or
- b) in the event of any changes to the proposed HDD watercourse crossing method for Alameda Reservoir West, Alameda Reservoir East and Pipestone Creek, at least 10 days prior to crossing,
  - i) notification in writing of any such change(s) and the rationale for the change(s);
  - ii) evidence of consultation with appropriate federal and provincial government authorities and provide copies of all relevant correspondence from them, including approvals for amended watercourse crossing methods; and
  - iii) file a description of amended reclamation and re-vegetation measures, and fish and fish habitat monitoring for the affected watercourse crossings.

**B.4 Enbridge Bakken must file with the Board, at least 30 days prior to starting each pre-construction survey for SARA-listed wildlife species:**

- a) the methodology(ies) for conducting the confirmatory surveys for SARA-listed wildlife species (including northern leopard frog and Sprague's pipit); and
- b) a summary of consultation on the methodology with appropriate federal and provincial government authorities, including copies of correspondence from these government authorities regarding the methodology(ies).

**B.5 Enbridge Bakken must file with the Board, at least 15 days prior to commencing construction:**

- a) the results of the confirmatory surveys for SARA-listed wildlife species, including northern leopard frog and Sprague's pipit;
- b) a detailed mitigation plan for each of the SARA-listed wildlife species affected by construction and operation activities;
- c) evidence of consultation with appropriate federal and provincial government authorities and copies of correspondence from these government authorities indicating their views on the proposed mitigation; and
- d) confirmation that the EPP and Environmental Alignment Sheets have been updated to include the mitigation measures developed or recommended as a result of the survey findings in consultation with the government authorities.



- B.6 Enbridge Bakken must file with the Board and MDWS, at least 15 days prior to commencing construction, the methodology for conducting the wetland survey, the results of the survey and evidence demonstrating consultation with appropriate federal and provincial government authorities indicating their views on the methodology and results of the survey.
- B.7 Enbridge Bakken must file with the Board for approval, at least 30 days prior to commencing construction, a detailed weed management plan. This plan must describe Enbridge Bakken's immediate and long-term weed control and monitoring procedures, treatment decision criteria and accountabilities for the construction and operations phases of the Section 52 Facilities as well as for the immediate post-construction reclamation period. The filed plan must include evidence that it was designed in consultation with any concerned landowners and federal and provincial government authorities.
- B.8 Enbridge Bakken must file with the Board, at least 30 days prior to commencing construction:
- a) a copy of the letter of clearance received from Saskatchewan Tourism; Parks Culture and Sport – Heritage Conservation Branch; and Manitoba Culture, Heritage and Tourism; and
  - b) a statement of how Enbridge Bakken intends to address any recommendations or comments contained in a).
- B.9 In the event of construction or clearing activities within restricted activity periods for all migratory birds, and non-migratory birds protected under provincial jurisdiction, Enbridge Bakken must retain a qualified avian biologist to carry out a pre-construction survey to identify any birds and active nests in areas immediately surrounding the site(s) and must file the following with the Board within 15 days following the commencement of these construction or clearing activities:
- a) the results of the survey;
  - b) mitigation, including monitoring, developed in consultation with Environment Canada, the Canadian Wildlife Service and the appropriate provincial government authorities to protect any identified migratory and non-migratory birds and their nests;
  - c) mitigation, including monitoring, developed in consultation with Environment Canada and the Canadian Wildlife Service to protect any identified SARA-listed birds and their nests; and
  - d) evidence to confirm that the appropriate federal and provincial government authorities were consulted on the proposed methodology for the survey, the results of the survey and the mitigation and monitoring to be used, and a description of any outstanding concerns they may have.

B.10 On or before the 31<sup>st</sup> of January following each of the first, third and fifth growing seasons after the completion of right-of-way reclamation and final clean-up activities for the Project, Enbridge Bakken must file with the Board and appropriate federal and provincial government authorities, a Post-Construction Environmental Monitoring Report that:

- a) describes the methodology used for monitoring, the criteria used for evaluating success and the results found;
- b) assesses the effectiveness of the mitigation measures applied during construction against the criteria for success;
- c) identifies any deviations from plans and alternate mitigation applied;
- d) identifies locations (e.g., on a map or diagram, in a table) where environmental issues arose during construction and where corrective actions were taken;
- e) identifies the current status of the issues identified (resolved or unresolved);
- f) includes details of consultation undertaken with appropriate provincial and federal authorities; and
- g) provides proposed measures and the schedule that Enbridge Bakken will implement to address any unresolved issues or concerns.

B.11 Within one year following the close of the five-year post-construction monitoring program, Enbridge Bakken must file with the Board and appropriate federal and provincial government authorities including MDWS, a Wetland Restoration/ Compensation Plan for the Project for all wetlands where wetland function has not been fully restored by the close of the program. This plan must include evidence that it was developed in consultation with appropriate federal and provincial government authorities, as well as details of any proposed alternatives to the above authorities' recommendations and the rationale for proposing those alternatives.

## **9.0 THE NEB'S CONCLUSION**

Pursuant to the CEA Act, the NEB has determined that, if the Project is approved and, taking into account the implementation of Enbridge Bakken's proposed environmental protection procedures and mitigation measures, compliance with the Board's regulatory requirements and the NEB's Proposed Conditions included in this ESR, the Project is not likely to cause significant adverse environmental effects.

This ESR was approved by the NEB on the date specified on the cover page of this report under the heading "CEA Act Determination Date".

## **10.0 NEB CONTACT**

Secretary of the Board  
National Energy Board  
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## **APPENDIX 1: Scope of the EA**

### **Enbridge Bakken Pipeline Company Inc. (Enbridge Bakken) Bakken Pipeline Project Canada (the Project) Scope of the Environmental Assessment (EA) Pursuant to the *Canadian Environmental Assessment Act* (CEA Act)**

#### **1.0 INTRODUCTION**

Enbridge Bakken is proposing to construct and operate the Project, which would require a Certificate of Public Convenience and Necessity pursuant to section 52 of the *National Energy Board Act* (NEB Act), as well an exemption order, pursuant to section 58 of the NEB Act. As a result, the Project is subject to a screening level of EA under the CEA Act.

On 19 October 2010, Enbridge Bakken filed a Project Description with the National Energy Board (NEB) regarding the proposed Project. The intent of the Project Description was to initiate the EA process pursuant to the CEA Act.

On 28 October 2010, the NEB sent out a Federal Coordination Notification letter, pursuant to section 5 of the CEA Act *Regulations Respecting the Coordination by Federal Authorities of Environmental Assessment Procedures and Requirements* (Federal Coordination Regulations). In response, the following departments identified themselves either as a Responsible Authority (RA) likely to require an EA under the CEA Act or as a Federal Authority (FA) in possession of specialist or expert information or knowledge in respect of the Project EA:

- NEB – RA
- Transport Canada – RA
- Fisheries and Oceans Canada – FA
- Environment Canada – FA
- Canadian Transportation Agency – FA
- Health Canada – FA
- Natural Resources Canada – FA

The Provinces of Saskatchewan and Manitoba were notified, although provincial EA legislation is not triggered.

This scope of the EA was established by the RAs, after consulting with the FAs, in accordance with the CEA Act and the Federal Coordination Regulations.

## **2.0 SCOPE OF THE ASSESSMENT**

### **2.1 Scope of the Project**

The scope of the project for the purposes of the EA includes the various components of the Project, as described by Enbridge Bakken in its application, which was submitted to the NEB on 17 January 2011. The physical activities include construction, operation, maintenance and foreseeable changes, and reclamation, relating to the entire Project, including physical works described in greater detail in the Project application.

The proposed Project would transport crude oil from a new pump station (the Bakken Pump Station) near Steelman, Saskatchewan, to the existing Enbridge Pipelines Inc. (EPI) Cromer Terminal near Cromer, Manitoba. The Project would involve the construction of a 123.4 kilometre (km) long, 406.4 millimetre (16-inch) outside diameter pipeline (the Bakken Pipeline) and associated facilities. The proposed pipeline corridor would be alongside and contiguous to an existing Enbridge Pipelines (Westspur) Inc. [Enbridge Westspur] right-of-way (RoW) and various other utility corridors for approximately 77.3 km of its entire length. The remaining 46.1 km would require new non-contiguous RoW.

Associated facilities would include five above-ground block valve sites installed along the Bakken Pipeline, a new Bakken Pump Station (approximately 150 x 100 metres) near the existing Enbridge Westspur Steelman Terminal and a new pig receiver at the existing EPI Cromer Terminal. A new permanent access road would also be required to access the Bakken Pump Station.

The Project would require the crossing of several watercourses, drainages, water bodies and wetlands. Enbridge Bakken is proposing to begin construction in the second quarter of 2012 and to have the entire Project in service in the first quarter of 2013.

Enbridge Bakken would also acquire and operate the existing 33.7 km long Line EX-02, which is currently owned by Enbridge Westspur and runs from the Canada/ United States border to Enbridge Westspur's Steelman Terminal. The short segment of Line EX-02 between Steelman Terminal and the proposed Bakken Pump Station would be deactivated as part of the Project.

Any works and activities associated with additional modifications or associated with the decommissioning or abandonment phase of the Project would be subject to future examination under the NEB Act and consequently under the CEA Act as appropriate. Therefore, at this time, any works or activities associated with these phases of the Project will be examined in a broad context only.

### **2.2 Factors to be Considered**

The EA will include a consideration of the following factors listed in paragraphs 16(1)(a) to (d) of the CEA Act:

- a) the environmental effects of the project, including the environmental effects of malfunctions or accidents that may occur in connection with the project and any cumulative environmental effects that are likely to result from the project in combination with other projects or activities that have been or will be carried out;

- b) the significance of the effects referred to in paragraph (a);
- c) comments from the public that are received during the EA process; and
- d) measures that are technically and economically feasible and that would mitigate any significant adverse environmental effects of the project.

For further clarity, subsection 2(1) of the CEA Act defines ‘environmental effect’ as:

- a) any change that the project may cause in the environment, including any change that it may cause to a listed wildlife species, its critical habitat or the residences of individuals of that species, as those terms are defined in subsection 2(1) of the *Species at Risk Act*,
  - b) any effect of any change referred to in paragraph (a) on
    - i) health and socio-economic conditions,
    - ii) physical and cultural heritage,
    - iii) the current use of lands and resources for traditional purposes by aboriginal persons, or
    - iv) any structure, site or thing that is of historical, archaeological, paleontological, or architectural significance, or
  - c) any change to the project that may be caused by the environment,
- whether any such change or effect occurs within or outside Canada.

### **2.3 Scope of the Factors to be Considered**

The EA will consider the potential effects of the proposed Project within spatial and temporal boundaries within which the Project may potentially interact with, and have an effect on components of the environment. These boundaries will vary with the issues and factors considered, and will include but not be limited to:

- construction, operation and site reclamation, as well as any other undertakings proposed by Enbridge Bakken or that are likely to be carried out in relation to the physical works proposed by Enbridge Bakken, including mitigation and habitat replacement measures;
- seasonal or other natural variations of a population or ecological component;
- any sensitive life cycle phases of species (e.g., wildlife, vegetation) in relation to the timing of project activities;
- the time required for an effect to become evident;
- the area within which a population or ecological component functions; and
- the area affected by the Project.

As indicated above, the EA will consider cumulative effects that are likely to result from the Project in combination with other projects or activities that have been or will be carried out.



## APPENDIX 2: Comments Received by the NEB on the Draft ESR

Government Authorities, Interested Groups and Enbridge Bakken	Comments	Enbridge Bakken response	Location in ESR where wording was modified	Explanation on why change was not made to the ESR
TC	<p>Requested greater clarity regarding whether the Crown or Enbridge Bakken would be undertaking further consultation.</p> <p>Recommended that the wording in Subsection 8.3.2.7 be revised to better reflect the timing of the consultation and intended process.</p>	n/a	Subsection 8.3.2.7	n/a
	<p>Stated that the Board's Proposed Conditions did not appear to address specific concerns raised by Aboriginal groups.</p> <p>Recommended that concerns raised by Aboriginal groups be explicitly addressed in the Proposed Conditions.</p>	<p>Stated that, while there may be general concerns relating to TLU sites and activities, to date, no Aboriginal group has identified any traditional use sites or traditional activities along the lands traversed by the Project, and that current landowners and occupants are unaware of any past or current TLU activities taking place on the lands traversed by the Project.</p> <p>Also stated that, in the event that Aboriginal groups identify any site-specific impacts on the current use of lands and resources for traditional purposes, it would consult with those groups in developing appropriate mitigation measures. In the event that any TLU sites are discovered during construction, Enbridge Bakken has committed to developing an appropriate mitigation plan in consultation with the appropriate authority and local Aboriginal groups, if necessary.</p>	n/a	<p>Several Aboriginal groups expressed concerns about spills and potential Project impacts on the environment, wildlife (including species at risk and nesting birds), weeds, watercourse crossings and wetlands. The Board notes that its Proposed Conditions in Section 8.6 of the ESR specifically address potential Project impacts on the environment, as identified above.</p> <p>The Board further notes as per Certificate Condition 18(b) in Appendix II of the Board's OH-01-2011 Reasons for Decision (the Reasons), it requires Enbridge Bakken to provide information on consultation activities undertaken with stakeholders and Aboriginal groups for the Section 52 Facilities during construction, including a summary of any issues or concerns raised and a description of how any concerns or issues were addressed.</p> <p>The Board is also of the view that, although there were general claims of traditional use in the Project vicinity, there was no specific evidence provided by Aboriginal groups about traditional land and resource use within the Project RoW. Even assuming that there are any potential impacts on traditional land and resource use identified by Aboriginal groups, it can be effectively mitigated through Enbridge Bakken's ongoing consultation with affected Aboriginal groups, implementation of its standard mitigation measures and the Board's conditions of approval. In addition, such impacts would be minimal because the Project would involve a relatively brief period of construction, with the vast majority of the facilities being buried.</p> <p>For further discussion, see Chapter 8 of the Board's OH-01-2011 Reasons.</p>

Government Authorities, Interested Groups and Enbridge Bakken	Comments	Enbridge Bakken response	Location in ESR where wording was modified	Explanation on why change was not made to the ESR
MIT	Stated that a Traffic Impact Study may be required to confirm whether intersection improvements are warranted, where construction access routes intersect provincial roads.	Acknowledged the letter from MIT and has no comments.	n/a	The Board notes Enbridge Bakken's commitment to file a Construction Traffic Management Strategy as part of its EPP, which would be submitted to the Board for approval prior to the start of construction. For further discussion, see Chapter 9 of the Board's OH-01-2011 Reasons.
EC	Recommended adding "(372 wetlands)" after "wetland habitat" in Section 5.0 - Wetlands.	n/a	Section 5.0	n/a
	Provided a number of comments and suggested wording with respect to SARA Schedule 1-listed wildlife species and COSEWIC-listed species as presented in Section 5.0 and Subsection 8.3.2.5.	n/a	Section 5.0, Subsections 8.3.2.5 and 8.3.2.6	n/a
	Recommended removing references to piping plover since the species was not listed in Enbridge Bakken's ESA.	n/a	n/a	The Board notes that Enbridge Bakken's ESA does include reference to the piping plover as a species at risk potentially occurring in the Project area.
	Recommended revisions in Section 5.0 with respect to the presence of northern leopard frog breeding habitat along the route to reflect the views expressed in its 17 June 2011 Letter of Comment.	n/a	Section 5.0	n/a
	Expressed concerns with respect to Enbridge Bakken's mitigation measures for plant species at risk as listed in Subsection 8.3.2.2.  Stated that transplanting and seedbank salvage/re-seeding is not supported by the Recovery Team for Plant Species at Risk for the Prairies.  With respect to potential occurrences of SARA Schedule 1-listed buffalograss, recommended avoidance or a 300 m setback.	Stated that it would be unable to re-route the Bakken Pipeline by 300 m from occurrences of buffalograss. In the event the species is identified along the RoW, Enbridge Bakken would implement mitigation measures as described in Appendix A4 of its draft pipeline EPP, excluding transplantation and seedbank salvage with re-seeding.	Subsection 8.3.2.2	n/a
	Requested clarification on Enbridge Bakken's wetland dewatering plans as listed in Subsection 8.3.2.4.	Clarified its commitment to not dewater any wetlands unless otherwise approved by the provincial regulator (i.e., the installation of the permanent road at the Bakken Pump Station).	Subsection 8.3.2.4	n/a

Government Authorities, Interested Groups and Enbridge Bakken	Comments	Enbridge Bakken response	Location in ESR where wording was modified	Explanation on why change was not made to the ESR
	Requested revisions to reflect the views expressed in its 17 June 2011 Letter of Comment with respect to Species of Special Status (as detailed in Subsection 8.3.2.6).	n/a	Subsection 8.3.2.6	n/a
	Expressed concerns with Enbridge Bakken's mitigation measures for migratory birds in the event that construction or clearing occurs within restrictive periods.	Stated that, in the event that construction or clearing occurs within a restrictive period, it would complete nest surveys, seven days prior to construction for species at risk and COSEWIC-listed species in suitable nesting areas and wetlands. In addition, it would use specific nest survey methodologies discussed in a recent meeting with EC.	Subsection 8.3.2.6	n/a
MDWS	Recommended that Proposed Condition B.11 be amended to require Enbridge Bakken to finalize a Wetland Restoration/Compensation Agreement with the Manitoba Heritage Habitat Corporation 60 days prior to construction.	Submitted that such an agreement would only be required in the event that there are residual impacts to wetlands, as determined by the results of the five-year PCM program.  Committed to working with federal and provincial authorities in the development of a wetland mitigation plan, wetland survey methodology, and wetland restoration and compensation matters.	n/a	This comment was also made during the oral hearing. The Board considered it and is of the view that residual effects to wetlands cannot be presumed to occur prior to construction and may only be determined at the conclusion of the PCM program. Given Enbridge Bakken's proposed mitigation measures and commitments, including a pre-construction wetland survey, five-year PCM program and reporting, ongoing consultation with federal and provincial authorities, and Proposed Condition B.11 requirements, the Board has decided to leave the relevant condition as proposed.
TFCC	Requested that Enbridge Bakken be required, through an additional condition, to undertake a TLU study and Traditional Resource Use Plan in consultation with Aboriginal groups in order to inform consultations respecting the adequacy of proposed standard mitigation measures to address adverse impacts of the Project.  Requested that Enbridge Bakken be required, through an additional condition, to undertake a cumulative impacts assessment to rights in consultation with Aboriginal groups in order to inform consultations	Submitted that such conditions are unnecessary because TFCC has participated fully in the regulatory process for the Project and has not provided any evidence to justify the proposed conditions.  Indicated that it is open to ongoing consultation with Aboriginal groups in developing mitigation measures for potential site-specific impacts to current use of lands and resources for traditional purposes that may be identified, if any.	n/a	98.5% of the pipeline would be on privately-held lands currently used for agriculture and ranching. The remaining 1.5% is on occupied Crown land. Although, there were general claims of traditional use in the Project vicinity, the Board is of the view there was no specific evidence provided by Aboriginal groups about traditional land and resource use within the Project RoW.  Even assuming there are any impacts on traditional land and resource use, the Board is of the view that such impacts would be minimal. This is because the Project would involve a relatively brief period of construction, with the vast majority of the facilities being buried. Furthermore, potential impacts on traditional use, if any, can be effectively mitigated through Enbridge Bakken's



Government Authorities, Interested Groups and Enbridge Bakken	Comments	Enbridge Bakken response	Location in ESR where wording was modified	Explanation on why change was not made to the ESR
	respecting the adequacy of proposed standard mitigation measures to address adverse impacts to rights.			<p>ongoing consultation with affected Aboriginal groups, implementation of its standard mitigation measures and the Board's conditions of approval. The Board further notes that the likelihood of any cumulative residual effects after the implementation of Enbridge Bakken's standard mitigation measures would be minimal.</p> <p>Therefore, the Board is of the view that a cumulative impacts assessment to rights, TLU study and Traditional Resource Use Plan are not required in this case.</p> <p>For further discussion, see Chapter 8 of the Board's OH-01-2011 Reasons.</p>
Enbridge Bakken	Proposed modifications to the Board's Proposed Conditions to enable the filing of pre-construction survey results for species at risk and wetlands in advance of construction.	n/a	Proposed Conditions B.5 and B.6.	n/a







